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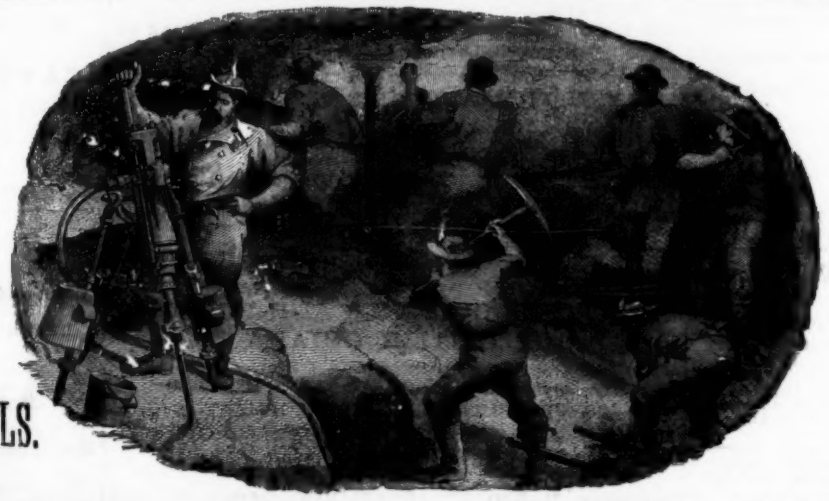

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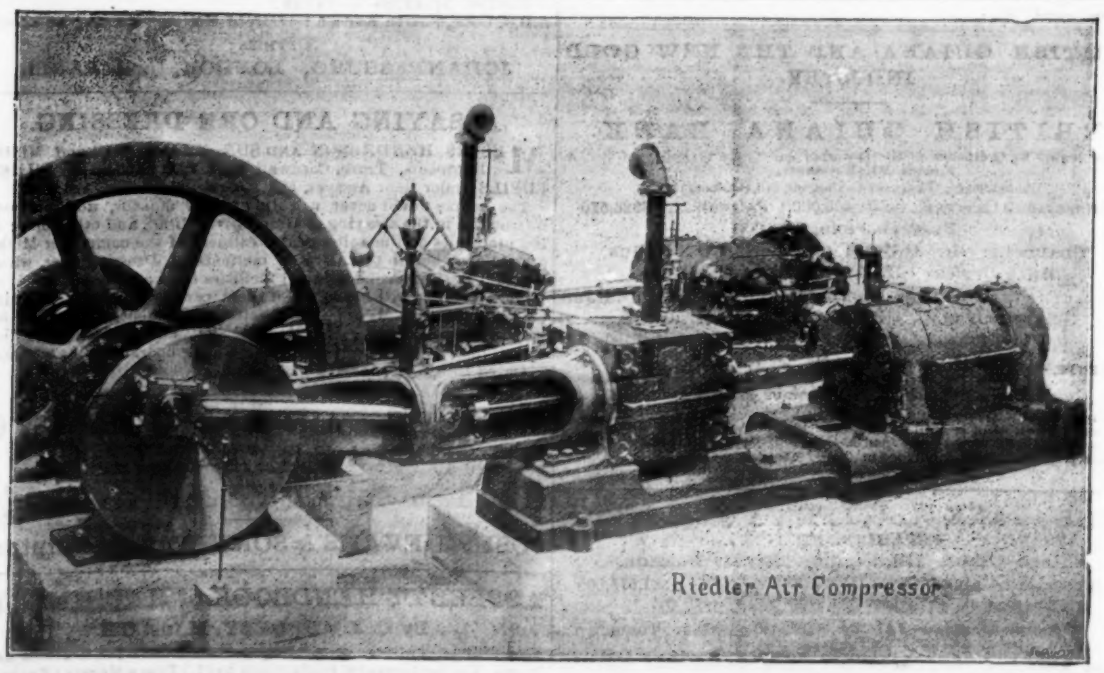

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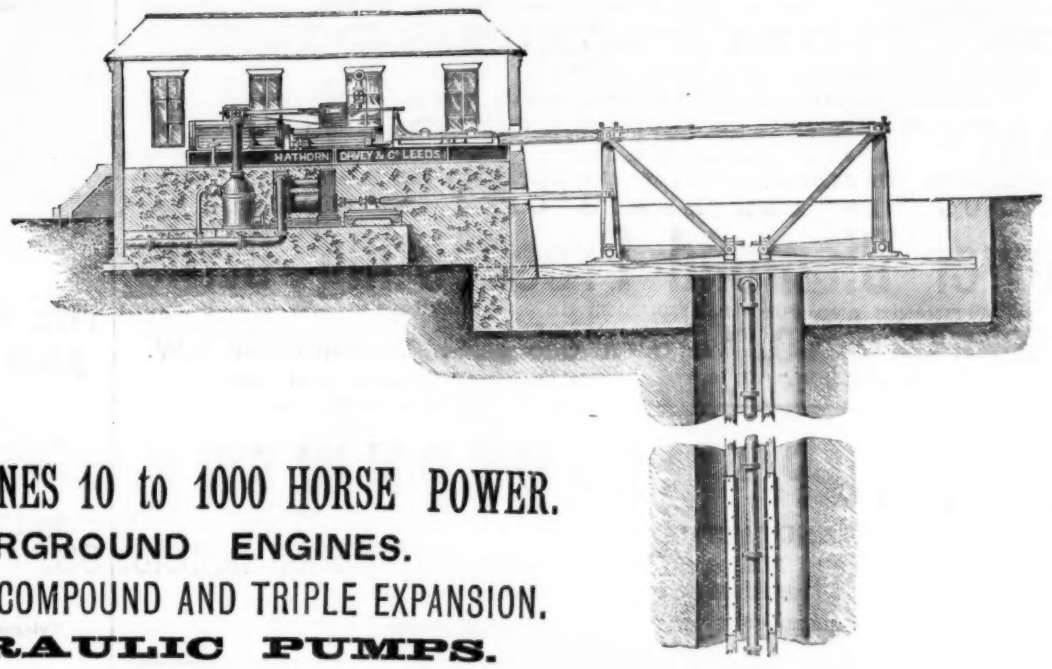

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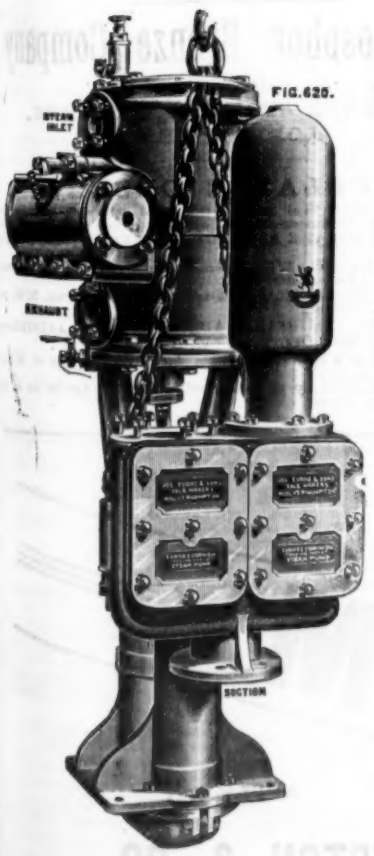

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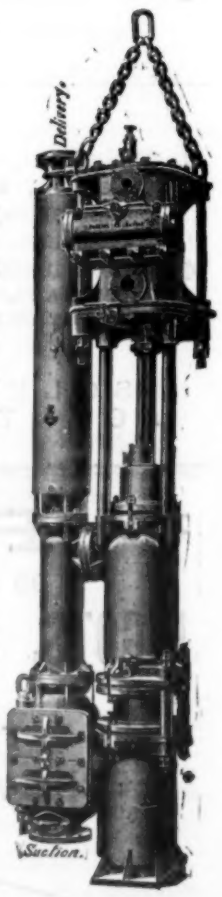

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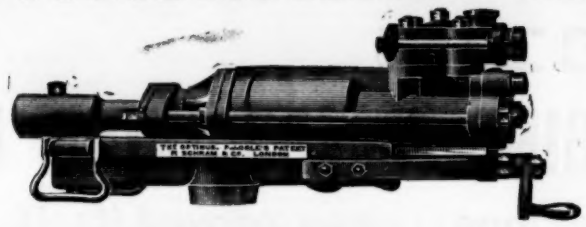

"OPTIMUS" COMPOUND ROCK DRILL.

(P J. OGLE'S PATENT.)

Consumes 40 per cent. less Compressed Air than any other Drill at the same time giving the most effectual results.

AIR COMPRESSORS,

WITH COMPOUND AIR AND STEAM CYLINDERS,

Fitted with SCHRAM'S Inlet and Outlet Valves giving the greatest efficiency.

"SCHRAM'S" IMPROVED ROCK DRILLS,

SUPPLIED TO THE INDIAN, COLONIAL, AND OTHER GOVERNMENTS.

2500 IN USE IN ALL PARTS OF THE WORLD.

Hand-Power Diamond Prospecting Drills.

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FRIED. KRUPP GRUSONWERK,

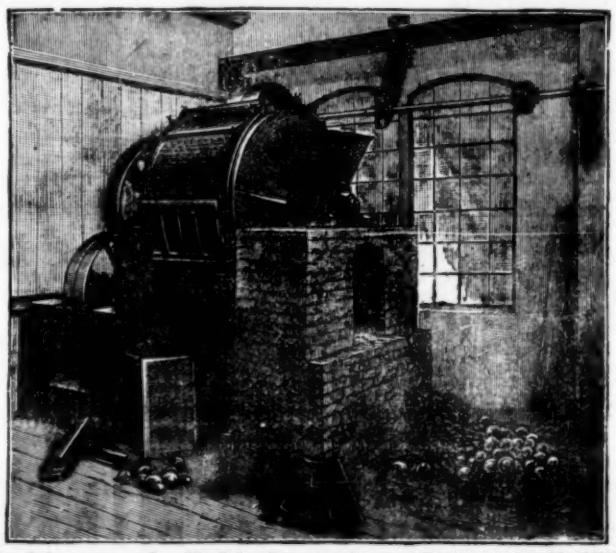
MANUFACTURERS OF

1. Chilled Cast Iron, Cast Steel and Malleable Iron Articles. MAGDEBURG-BUCKAU.
2. Machinery and Apparatus for treatment of Ore of all description.

GOLD EXTRACTION MACHINERY.

(Laszlo' Amalgamators giving 20 to 40 per cent. more Gold than others).

SILVER EXTRACTION MACHINERY.



STAMP BATTERIES.

Patent Ball Mills.

(Dry Crushers).

ORE-CONCENTRATION

DRY SEPARATOR

OF

PAPE-HENNEBERG.

3. Disintegrating Machinery of all kinds, such as Patent Ball Mills for Ores, Quartz, Cement, Basic Slag Grinding, &c. Excelsior Mills for Food Products, also for Tanneries, Chemical Factories, Sugar Factories, &c. Stone Breakers, Roller Mills, Crushers, &c., &c., Runners.
4. Whole installation for Cement, Porcelain, Emery, Manure, Gypsum, Bone, & Ore Mills.

HYDRAULIC PRESSES. LEAD PIPE PRESSES. COMBINED COFFEE GRINDING AND CLEANSING MILLS. ROLLS FOR ALL METALS. CRANES. RAILWAY MATERIAL.

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"CHAMPION" ROCK DRILLS

Have all the latest improvements resulting from 19 years' practical experience in constant work.

Unrivalled for efficiency and durability in Sinking Shafts, Driving Levels & Tunnels.

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SOLE PROPRIETORS AND MANUFACTURERS,

E. P. and H. P. VACHER,

MAKERS OF ROCK DRILLS, AIR COMPRESSORS,

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MINING MACHINERY.

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The Best Alloys for all Wearing parts of Machinery, Bearings, &c.

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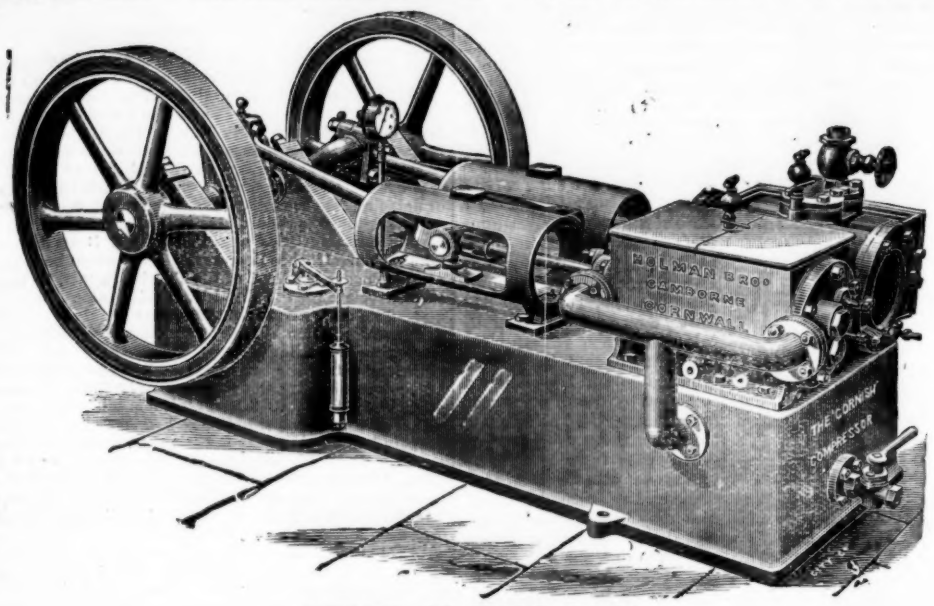
HOLMAN Bros., Camborne, Cornwall.

ESTABLISHED 1839.

Patentees and Sole Makers of

"THE CORNISH" ROCK DRILL and "THE CORNISH" COMPRESSOR.



RECORD OF WORK DONE

At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour

At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by 5 **FEET PERPENDICULAR RISE 46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

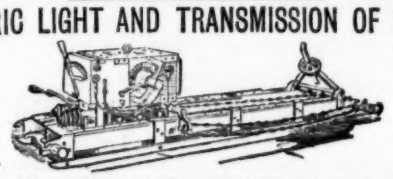
Estimates for ROCK BORING PLANT and GENERAL MINING MACHINERY on Application.

London Offices: 7 and 9, LEADENHALL BUILDINGS, E.C.

JOHN DAVIS & SON,

ALL SAINTS WORKS, DERBY;
118, NEWGATE STREET, LONDON, E.C.
CARDIFF, JOHANNESBURG, CALCUTTA.

ELECTRIC LIGHT AND TRANSMISSION OF POWER.

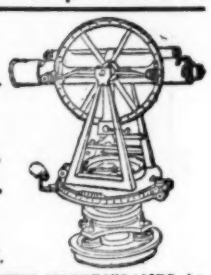


Jeffrey Machines for Undercutting Coal,
WORKED EITHER BY COMPRESSED AIR OR ELECTRICITY.
OVER 600 IN DAILY USE.

ELECTRIC
BLASTING APPARATUS.
HIGH OR LOW TENSION
EXPLODERS.
CABLES, FUSES.

Electric Signals
and
Telephones.

MINING AND
SURVEYING INSTRUMENTS,
THEODOLITES, HEDLEY
DIALS, LEVELS,
CLINOMETERS.



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ALL PARTS INTERCHANGEABLE.

CATALOGUES UPON APPLICATION.
SEC. A. MATHEMATICAL & MINING INSTRUMENTS, MINERS' LAMPS, &c.
SEC. B. ELECTRICAL PLANT AND STORES.

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THE LEADING NORTH QUEENSLAND WEEKLY.
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Address communications to—
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CHARTERS TOWERS, QUEENSLAND.

AWARDS: CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

CONCENTRATION.

The Clarkson-Stanfield Ore Reduction Co. (Limited).

In the **CLARKSON-STANFIELD** process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

OUTPUT ½ TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS,

6, COLONIAL AVENUE, MINORIES, LONDON, E.

The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carndochan Mine, near Bala, North Wales, will, by arrangement, show their **CLARKSON-STANFIELD** plant working on a Refractory Low Grade Gold Ore.

NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

7182 Joshua Entwisle, 5, John Dalton Street, Manchester.—Improvements in high-pressure steam generators.—April 7.

7181 William Gibson and William Henry Palmer, 38, Chancery Lane, London.—Improvements in and apparatus for the manufacture of metallic belting and metallic chain rope.—April 7.

7191 Thomas Spencer James, 170, Camden Grove, Peckham, London.—Improvements in metal tube and machinery for producing the same.—April 7.

7197 Henry Robert Angel, 7, St. Helen's Place, London.—The recovery of zinc from refractory ores.—April 8.

7199 Mathew Berger, 46, Chancery Lane, London.—Improvements in steam valves for steam cylinders.—April 8.

7205 John Farquharson McIntosh, Daniel McCallum, and Robert Watson, 41, Reform Street, Dundee.—Improvements in and relating to gauge glasses for steam generators and the like.—April 10.

7232 William Isaac Last, 28, Southampton Buildings, Chancery Lane, London.—Heating steam engine cylinders, covers, and pistons.

7270 James Henry Townsend and William Dixon, 5, Quality Court, Chancery Lane, London.—Improved method of and means or apparatus for controlling cages in mines, corves, and trucks on inclines, and hoists or lifts.—April 7.

7221 Robert Abbott Hadfield, 46, Lincoln's Inn Fields, London.—Improvements in the manufacture of steel or alloy of iron.—April 7.

7231 Owen Meredith, 46, Laird Street, Birkenhead.—Improvements in tubes for steam boilers.—April 11.

SPECIFICATIONS PUBLISHED.

24981, Parker, treating sulphide ores, April 11, 1894; 5740, Orvis, steam boiler, April 11, 1894; 5749, Orvis, steam boiler, April 11, 1894; 9585, Makin, steam boilers, April 11, 1895; 9907, Taylor, steam generators, April 11, 1895; 2488, Fairweather, steam generators, April 11, 1896; 3593, Getty, steam engines cylinder valves, April 11.

The above specifications published may be had of Messrs. Rayner and Co., 37 Chancery Lane, London, at 10d. each, including postage.

THE SOUTH AFRICAN SALTPETRE FIELDS (LIMITED).—We are informed that the necessary plant for the treatment of the large deposits of nitrate of potash on this company's property at Prieska has been ordered, and will be shipped to South Africa in the course of a few weeks; meanwhile, a consignment of the nitrate, containing 90 per cent. of pure saltpetre, has been sent home, and is expected shortly at Southampton.

MESSRS. F. C. MATHIESON'S Monthly Mining Handbook of Mid-April is to hand, replete, as usual, with useful information.

JOINT-STOCK COMPANIES.

NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

Mount McDonald Gold Mines (Limited).—Registered April 11 by Burgoyne, Watts, and Co., 77 Gresham Street, E.C., with a capital of £30,000 in 10s. shares. Object: To acquire certain mines, mining rights, &c., in Australia or elsewhere; to develop and turn to account the same, and to carry on the business of a mining and smelting company in all its branches. The directors are to be elected by the signatories. Qualification, £100. Remuneration, £150 per annum, divisible.

Menzies Venture Syndicate (Limited).—Registered April 13 by Muret, Pering, Smith, and Co., 81, Cannon Street, E.C., with a capital of £12,500 in £1 shares. Object: To acquire any mines, mining rights, &c., in Great Britain and elsewhere, and to develop, work, and turn to account the same in such manner as the company shall see fit. Registered without Articles. Registered office: Dashwood House, New Broad Street.

Transvaal Northern Exploring Company (Limited).—Registered April 13 by the Transvaal Exploring Company (Limited), 25, Abchurch Lane, E.C., with a capital of £40,000 in £1 shares. Object: To acquire any lands, mines, mining rights, &c., in the South African Republic or elsewhere; to develop and turn to account the same; as miners and smelters generally. The directors are to be elected by the signatories. Qualification, £100. Remuneration to be fixed by the company.

Luipaard's Vlei Estate and Gold Mining Company (Limited).—Registered April 10 by Julius and Thomas, 15, Finsbury Circus, E.C. Capital £250,000, divided into 250,000 shares of £1 each. Objects: To acquire and enter into any contract, either absolute or conditional, for the acquisition as a going concern of the undertaking of the Luipaards Vlei Estate and Gold Mining Company (Limited) in liquidation, and all or any part of the real and personal property situate in South Africa or elsewhere of that company, and of all or any of the rights, privileges, money, securities, and assets thereof, and to undertake, pay, discharge, satisfy, perform, and fulfil all or any of the debts, liabilities, contracts, engagements, and obligations of that company; and to acquire and turn to account any freehold lands, farms, estates, mines, mining, water, and other rights, grants, leases, claims, concessions, options of purchase, alluvial ground, metalliferous land, &c., in Africa, or elsewhere; to develop and turn to account the same in such manner as the company shall see fit, and to carry on the business of a mining, milling, smelting, and metallurgical company, in all or any of its branches; to construct, maintain, and work rail and tramroads; to employ and despatch prospecting and exploring expeditions; to develop and turn to account such lands, &c., as may from time to time be acquired by the company by clearing, draining, farming, planting, building thereon, &c.; to carry on business as bankers, capitalists, financiers, company promoters, metal workers, builders and contractors, engineers, farmers and graziers, horse and cattle dealers, coach proprietors, traders, shipowners, storekeepers, importers and exporters, &c., in all or any of their respective branches; and with a view to the foregoing objects, or any of them, to adopt and carry into effect an agreement expressed to be made between the Luipaard's Vlei Estate and Gold Mining Company (Limited)—the old company—and Herbert George Henry Norman, and Henry David Boyle, the liquidators of the said company of the first part, and this company of the other part.

Great Victoria Gold Mining Company (Limited).—Registered April 13 by Mayo and Co., 10, Drapers' Gardens, E.C., with a capital of £75,000, divided into 75,000 shares of £1 each. Object: To adopt and carry into effect an agreement expressed to be made between the International Trust and Finance Corporation (Limited) of the one part and the Great Victoria Gold Mine (Limited) of the other part; to acquire by purchase, lease, or otherwise, any freehold or other farms, properties, mines, mineral deposits, grants, concessions, leases, claims, licenses, water and other rights in Australia or elsewhere; to prospect for gold, silver, copper, coal, iron, and other metals and minerals; to develop and turn to account such lands, &c., as may from time to time be acquired by the company, by clearing, draining, fencing, planting, farming, and building thereon; to construct, maintain, and work rail and tram roads, telegraph and telephone systems, canals, wharves, piers, gas, water and electric works, &c.; as stockraisers, shipowners, &c.

CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

*** *We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.*

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

HOME CONTRACTS.

Coal. April 27 (*Birkenhead*).—For the supply of house coal from July 1 for the use of the joint stations in the Birkenhead district, the Shrewsbury district, and on the West London line, for the joint committee of the London and North-Western and Great Western Railway Companies. Forms of tender may be had on application to Mr. J. Wait, secretary, Birkenhead, to whom tenders, endorsed "Tender for Coal," must be delivered by 10 a.m. on 27th inst.

Pipes. May 4 (*Stalybridge*).—For the supply and delivery, at Dukinfield, Cheshire, of about 800 tons of cast iron pipes, 3 feet diameter, for the Stalybridge and Dukinfield Joint Sewerage Board. Specifications, forms of tender, and particulars may be obtained at the offices of the engineers, Messrs. John Newton and Son, 17, Cooper Street, Manchester, and sealed tenders, addressed to the Chairman of the Joint Board, to be sent to Mr. Wm. Smith, clerk, Council Offices, Dukinfield, by May 4.

Rails. May 5 (*Liverpool*).—The Cheshire Lines Committee require tenders (from manufacturers only) for the supply of 2000 tons Bessemer steel rails. A specimen rail may be seen and the specification and form of tender obtained on application to the engineer, Mr. W. G. Scott, C.E., Central Station, Liverpool. Sealed tenders, endorsed "Tender for Steel Rails," to be sent by post addressed to Mr. Thomas Glegge, secretary, Board Room, Great Northern Railway, King's Cross Station, London, so as to be delivered by 9 a.m. on May 5.

Gas Coal. May 14 (*Gouda, Holland*).—For the supply of about 3600 tons of gas coal. Applications to the Direction of the Gouda Gasworks.

Sinking Pit (*Rhymney, Wales*).—For the sinking of a pit at their Duffryn Rhymney Colliery, for the Rhymney Iron Company (Limited). Specification can be obtained on application at the General Office, Rhymney Ironworks, for which a fee of 10s. 6d. will be made.

MECHANICAL ENGINEERING:

MACHINERY, MINING and RAILWAY PLANT, &c.

Illustrated Descriptions of New and Standard Mechanical Appliances, Accessories and Processes, adapted to Mining, Metallurgical, Railway, Engineering and other Industrial Purposes.

WOOD'S DRY PLACER MINER.

THIS machine, of which we give an illustration and description, is manufactured by the famous firm of Messrs. Fraser and Chalmers. Practical experience in the working of alluvial placer grounds having demonstrated to the inventor the need of a machine that would effect a saving not merely of the coarser particles of gold, but also of the finer, including that known as flour gold, he designed the present one. He used the first or

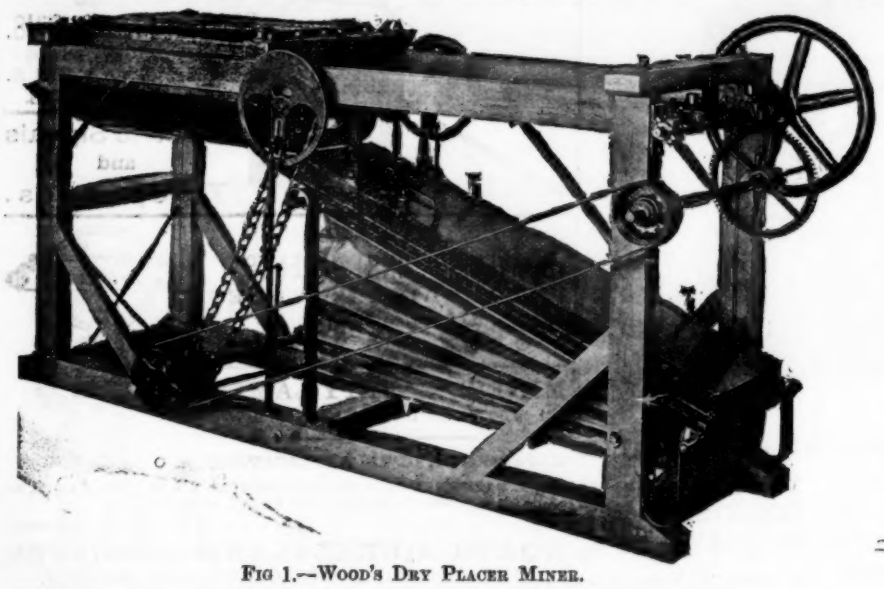

FIG 1.—WOOD'S DRY PLACER MINER.

"model" machine, which was necessarily somewhat crude in construction, for working placer grounds in Mexico, and with such gratifying results that he at once proceeded to perfect its details, with the result that this machine embodies several important improvements on the model machine. It has also been subjected to some very crucial tests which proved its practical value and realised all expectations. Two very important features of this machine are—first, that it is not essential to a close saving that the material to be treated should be absolutely dry, but only that it should be free from such excessive moisture as would cause it to coagulate after leaving the disintegrator or to adhere to the riffles or other parts of the machine; second, that unlike other processes, including hydraulicing or sluicing, it will effect a separation of the gold from heavy material such as black sand, which always contains a large amount of metallic iron.

The machine is effective in the treatment of sand, gravel, loam, debris, or other material constituting gold-bearing deposits known as placer ground or for dry crushed ore. The ground is conveyed by scraper to a platform placed over a hopper at the lower end of a charging elevator, and is dumped upon a grizzly screen. This separates the large boulders or pieces of barren rock, while the material containing values passes through into the hopper.

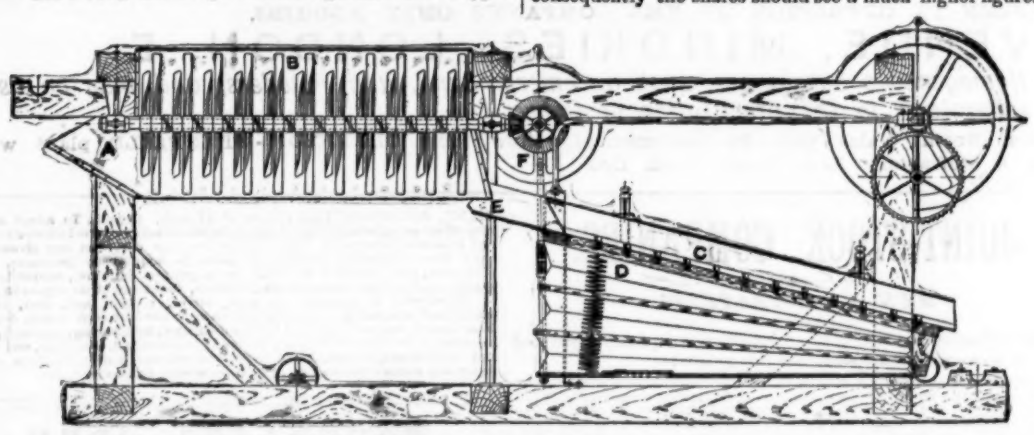

FIG. 2.—SECTIONAL VIEW.

The grizzly lies level above the hopper, and any boulders that may be left upon it are readily removed by the man in charge after the manner customary in placer mines. From the hopper the material passes to the elevator or conveyor, which is of the double chain (or link belt) and pan type, and is carried up and falls into the feed hopper (A, Fig. 2) of the disintegrating or pulverising cylinder of the machine proper. The disintegrator or pulveriser (B) consists of a cylindrical chamber containing two horizontal shafts, arranged side by side and parallel to each other, each shaft carrying a number of beaters, the blades of which are set at an angle something like the blades of a propeller. The shafts carrying these beaters revolve in opposite direction, so that the material is not only pulverised by the impact of the blades, but is also carried forward continuously towards the table of the machine. The disintegrator thus feeds the material in a constant and uniform stream to the table on which separation is effected. This table (C) is inclined and forms the upper part of a bellows (D), the whole being suspended on flat steel springs, allowing a shaking or panning movement which is imparted by means of side rods with eccentrics upon a shaft, the rods being so shaped as to permit ready access to the sides of the table for cleaning up. The table consists of a plate of perforated metal forming the top or upper frame of the bellows, and upon it is placed a layer of carpet or cloth of such texture as will allow air to pass through without permitting any particles of pulverised material to drop into the interior of the bellows. Copper riffles are placed at intervals upon the diaphragm of cloth or carpet, and extending across the table. These are secured by means of side boards, provided with clamping screws, so that they can be readily removed for cleaning up. The table is enclosed with a sheet steel sliding cover, leaving about 6 inches space above its surface.

The material leaves the disintegrator at E, passing to the table, over the entire width of which it is distributed equally by the shaking or panning movement. It is thus borne downward towards the tail end of the machine, assisted by pulsating blasts of air from the bellows. The vibrations of the table cause the larger and lighter particles, or gangue, to find place at the top of the stream of material, while the blasts of air from the bellows force the fine sand and dust up and out of the machine, allowing the fine gold to gravitate downward and settle on the cloth behind the riffles. The gold is thus saved, while the light, coarse gangue rolls down the incline over the riffles and is discharged as tailings. A leather flap valve is placed across the table at the upper end, so that while allowing the material to pass from the disintegrator to the table it prevents the dust from coming out at the feed end of the machine. The bellows are worked by means of connecting rods and disc cranks (F), the crank discs having slotted holes to receive the crank pins, so that the stroke of the bellows may be adjusted, regulating the blast according to the fineness of the gold. The tailings pass from the machine to an elevator or conveyor similar to that employed at the feed end, and are thus carried out of the way, either to a car or directly to the dump. A clean up should be made at least once a day, and may be accomplished by stopping the machine, removing the dust cover and carefully taking out the riffles. The concentrates that have accumulated behind the riffles are collected by use of a common hair brush. Commencing at the top they are brushed down the incline into a pan or other receptacle placed to receive them. Having thus carefully collected the concentrates they can be panned or cleaned in the usual way. While the machine is in operation the steel slide covering the table is secured by padlock, so that the valuable concentrates cannot be tampered with.

JOHANNESBURG NOTES.

By H. BUSH M.E.

BONANZA.

A start will shortly be made as the battery is now nearing completion, and the erection of cyanide vats will be finished shortly. Mine development is well forward, and there will be no difficulty in keeping the battery going.

BALMORAL.

Good progress in development, and the reefs are looking well, assays from all parts giving high results.

ROODEPOORT HEIDELBURG.

Considerable improvement is shown as development proceeds. The reefs in the lower levels are all giving results far exceeding all expectations. Ground in the neighbourhood is being acquired by financiers at big prices.

FERREIRA.

The prospects are very good for the future, and the thickening of the south reef gives this mine a very much longer life, consequently the shares should see a much higher figure.

BRADBURY'S.

Considerable activity has been displayed in these shares in consequence of the information that subsidiary companies for Australia, New Zealand, and America have been floated in London to great advantage to shareholders irrespective of the fact that local orders for the new power machines are coming in on all sides, which will mean large profits to the parent company.

BUFFELSDOORN.

There is no improvement, and the dyke still gives considerable trouble.

NEW ORIONS.

Improvement still continues, and the battery will shortly be started again, and some very rich ore will be put through. There should be a very substantial rise in these shares.

GELDENHUIS DEEP.

The prospects are very much better than they have been for some considerable time, the cost of development being very small, and the reefs are improving as depth is attained.

CROWN DEEP.

The south reef recently cut in No. 2 shaft at 1150 feet continues to maintain its richness, and the size of the lode is increasing and assays up to 5 ounces.

WE are informed that Mr. Charles C. Moore, F.I.C., has commenced practice at Harley Buildings, 11, Old Hall-street, Liverpool, as an analytical and consulting chemist. Mr. Moore has been engaged for many years with the well-known firm of Brunner, Mond, and Co. (Limited), and had the management and full control of their laboratory.

THE TRANSVAAL CRISIS.

A GOVERNMENT OF MINES.—A PROPOSED SOLUTION OF EXISTING DIFFICULTIES.

By B. H. THWAITE, C.E.,

Author of "The Electoral Government of Greater Britain," &c., &c., "The History of the Boers and the British in South Africa, England, and Venezuela, &c."

KRUGER'S delay in replying to Chamberlain's reform proposition is being utilised to the detriment of English interests. It is, however, quite natural that President Kruger and his executive should fear the extension of the franchise; they realise rightly that the Boer element (in a Rand constituted of members properly representing the people of the Transvaal) would be numerically swamped, and the power of the Uitlander would be supreme. We cannot blame them for putting back the hands of the clock, or delaying for themselves what they think would be the arrival of an evil day. One should give even the devil his due—and there are certain characteristics possessed by the Boers that command our admiration. If the Boer agriculturist could be brought up in technical science to the level of the English farmer, he might become an ideal associate for the English-speaking miner, who is a thoroughly up-to-date man. Never in the history of gold mining has there been such an association of high technical and theoretical skill as at present exists in the Rand.

Unfortunately the two classes—the agriculturist and the miner—are quite distinct. One is more or less of a wanderer, whilst the other is stationary to the soil, although historic treks of the Boers rather qualify this distinction. The Transvaal Boer is at least a century behind the average Uitlander, and it is hardly possible to imagine the two working in governmental harness together. What, therefore, should be done to enable Kruger's Government to continue in peaceful and unthreatened existence, and still permit the removal of the Uitlanders' legitimate grievances? Our Colonial Secretary's suggestion is unfortunately more or less unworkable. The Rand district of the Transvaal is only one portion of the auriferous area. Besides this Rand gold field there are others, widely separated; for instance those of Klerksdorp, Potchefstroom, Barberton, and Lydenburg. The solution of the difficulty might be obtained by the carrying out of the following programme.

The Proposed Government of Mines.

A Government of Mines to be appointed, having its seat at Johannesburg, and having for its electorate the population working and residing on the gold and township claims owned by the Uitlanders.

The franchise should depend upon ownership of property in land or in shares of companies operating on the Rand, and should only extend to actual residents, residing at least six months in the year in the Transvaal; the right to vote at an election to depend upon a six months' prior ownership of shares or other property.

The representation should be arranged on the basis of equal numerical proportion.

The legal language and the language employed in municipal instructions should be that spoken by the majority of the Uitlanders. The English language would, therefore, be the language adopted.

The jurisdiction of the Government of Mines should be limited to the following:—

1. The framing and control of the laws relating to mines.
2. The right of amending and enforcing such laws.
3. It should be allowed to frame its own educational code, and to establish a University of Mines.
4. It should be permitted to appoint its own administrators of justice.
5. An expert executive committee to be appointed to consider all mining grievances.
6. In disputes between the adherents to the Government of Mines, and those of the Government of Pretoria (to be called the Supreme Government), the trials should be held in a joint court, with administrators of justice representing the two Governments.
7. The officers of law and order shall be appointed by the Government of Mines for the area under its control.
8. All townships under the Government of Mines to be subject to such Government, and the municipal laws, whether relating to lighting, sanitation, religion, education, or the freedom of the Press, shall be framed by the Government of Mines.
9. The Government of Mines shall be permitted to tax its electorate.
10. The Government of Mines shall only be permitted to arm its officers of law and order; it shall not be allowed to establish a military organisation except with the consent of the Supreme Government of Pretoria.
11. The Supreme Government of the Republic of the Transvaal shall alone maintain a military organisation.
12. The Supreme Government shall receive from the Government of Mines a certain fixed royalty depending upon the richness of the ore, on all gold, or other metal won from the mines.

In return for this, the Supreme Government shall faithfully fulfil the obligations:—

First. It shall assist in every possible way in the opening up and maintaining the lines of inter-communication between the gold fields of the country.

Second. It shall encourage a higher rate of agricultural cultivation, and do everything in its power to facilitate the provisioning of the mining population with cheap and unadulterated foreign or native grown food.

Third. It shall remove all onerous restrictions to the introduction into the country of provisions and raw and manufactured materials that are required by the mining communities.

Fourth. It shall facilitate by all means in its power the provision of ample water accommodation both for domestic and mining purposes.

Fifth. It shall do all in its power to provide cheap and plentiful labour for carrying on the mining and associated industries.

Sixth. In the event of an outbreak amongst the mining population threatening the maintenance of peace and order, the military forces of the Supreme Government shall be placed at the service of the Government of Mines.

Seventh. The President of the Supreme Government shall be the Honorary and Chief President of the Government of Mines.

The formation of such a Government would enable the Uitlanders to obtain all they have a reasonable right to have. It would not displace nor materially curtail the just power of the existing Government. The deliberations of the Supreme Government would be devoted to the amelioration of the agricultural methods of the Boers and to the improvement of the means of transport between the different mining centres and the main railway lines to the great advantage of both Boer and Uitlander. The two Governments mutually dependent upon each other could not fail to work in harmony together, and the unchristian-like jealousies and the race hatred so conspicuous under the present conditions would gradually disappear. The following desirable changes would follow the formation of the Government of Mines:—

1st. The repeal of the onerous dynamite concession.

2nd. The reduction to a reasonable rate of the extortionate tariffs charged by the Netherlands Railway.

3rd. The exorbitant taxation produced by excessive import duties on food stuffs would be stopped.

4th. The iniquitous taxation, amounting to some 5s. a ton on the ore mined, would be reduced by at least one half, and this reduction would permit the mining of low-grade ore impossible under the scandalous present system of taxation.

The foregoing scheme if briefly outlined will, the author considers, not only be practicable, but it would most likely be acceptable to the Rand, to the Boers, and to the Uitlanders.

DISCOVERY OF MERCURY ORE NEAR LIONSVILLE. (N.S.W.)

By JOSEPH B. CARNE, F.G.S.

I HAVE inspected the recent discovery of cinnabar on Yulgilbar Station, Clarence River. The deposit occurs about 5 chains from the south-west corner of portion 15, Parish Ewingar, County Drake, and about ¾ of a mile west of the Clarence River.

The nearest settlement is Lionsville, distant about 7 miles, in a south-west direction. The discovery was made by Laurence Fox, about 12 months ago, through picking up a loose surface specimen of the matrix containing cinnabar. Actual prospecting began in February last.

A previous discovery was recorded in this district in 1891, at Horseshoe Bend, about 16 miles lower down the course of the river, and about 3½ miles south-east of Lionsville. This site has been surveyed as M.L. 5 of 40 acres in the parish of Carnham. Mr. Geological-Surveyor David reported on this deposit about March of the same year, and recommended aid from the Prospecting Vote* for proving it. The occurrence is briefly described as "a dyke 12 feet wide, of felspathic rock allied to serpentine, containing cinnabar distributed irregularly in spots and minute veins. This dyke has intersected the granite of the district at this locality, and is likely, I think, to be permanent to a considerable depth."

The present report will be limited to a brief description of the country rocks, nature and apparent mode of occurrence of the mercury ore, present and suggested future prospecting, &c.

To attempt an estimate of the richness of the deposit, or of the quantity of ore likely to be available, at the present initial stage of exploration, would be unfair, even if not altogether impossible. Sufficient data, however, will be adduced to justify the opinion that the prospects are decidedly encouraging, and far superior to those afforded by any previous discovery recorded in the colony.

Previous Discoveries.

The localities of previous discoveries, with references to reports thereon, may be briefly summarised as follows:—

Near Rylston, Cudgegong River, County Roxburgh—Rev. W. B. Clarke, Min. Statistics N.S.W., 1875, p. 201.
Mookerawa and Great Waterhole of Ophir, County Westmoreland—Prof. Liversidge, Min. of N.S.W., p. 52.
*Clifton Mine, Boorook, County Buller—Prof. Liversidge, Min. of N.S.W., p. 52.
*Wagonga Mine, County Dampier—Prof. Liversidge, Min. of N.S.W., p. 52.
*Moruya, County Dampier—Prof. Liversidge, Min. of N.S.W., p. 52.
*Calton Hill, Dungog, County Durham—Prof. Liversidge, Min. of N.S.W., p. 52.
*Grove Creek, Abercrombie Mountain, County Georgiana—Prof. Liversidge, Min. of N.S.W., p. 52.
*Near Scone, County Brisbane—Mr. Dickson.
Spring Creek, near Bingara, County Murchison T. W. E. David, Annual Report Dept. of Mines, N.S.W., 1891, p. 234.
Horseshoe Bend, Clarence River, County Drake—T. W. E. David, Pros. Board Papers, 91, 276.

Whilst writing, this report on samples of galena and zinc blende with cinnabar has been brought to the Geological Survey office for assay with a statement that it was obtained from Sunny Corner, Mitchell, County Roxburgh.

General Geological Features.

The country at the cinnabar deposits consists of hornblende, granite, felsite, and augite diorite; whilst in the immediate neighbourhood serpentine is largely developed.

The sedimentary rock of the district consists of altered slate, which has been referred to the Devonian formation by the late Government Geologist, Mr. C. S. Wilkinson. . . . The gold reefs of Lionsville occur in the latter, where it has been intruded by granite dykes.

The special feature of the most important mercury mines of the world—viz., association of igneous rocks with sedimentary strata—is absent in the present case. So far as yet proved, the mercury ore is confined to the igneous rocks.

Prospecting Operations.

At the time of inspection, in October last, prospecting operations had just been resumed after a short respite. Two shafts have been sunk, 20 and 50 feet respectively, about 3½ chains apart on a line bearing north 15° east and south 15° west. These shafts are on distinct veins, which have an east and west trend.

From the 50 feet shaft a line of shallow surface openings has been extended for about 29 chains in a direction 25° north of east. These openings have been made wherever any of the characteristic fine-grained felsitic and chalcedonic matrix appeared at surface. In some instances the openings have been on loose and isolated boulders; in others, there is evidence of veins *in situ*, but not sufficiently pronounced to allow of a definite strike being determined for the complete line. It appears more likely that these veins are numerous. Traces of cinnabar were detected in most of these openings, but nothing approaching payable ore.

A second line of shallow openings has been made along a well-defined outcrop of similar rock. This line bears east 5° south from a point 80 links south of the 50 feet shaft. The openings extend for about 16 chains east from the shaft; the outcrop, however, can be traced at least twice that distance to the Clarence River, near the west bank, of which it forms a bunch or "blow." Some years ago this bunch was prospected for gold. Cinnabar could not be detected here, though numerous freshly-broken specimens were examined. I was informed, however, by Mr. T. Bassetti—one of the shareholders of the Cinnabar Mine—that that mineral would be identified upon crushing and washing the samples of the rock.

Detail of Prospecting and Appearance of Ore in the Workings.

The main 50 feet shaft being timbered for about 20 feet from surface, an examination of the appearance of the ore veins near the surface could not be made for the purpose of comparison with those presented in the shallow openings above described. Below the timbering the discolouration obscured all traces, if any existed, of the ore, to within a few feet of the bottom in the south-eastern end of the shaft; thin veins of cinnabar traverse irregularly about 1 foot of felsite country. In the north-western end a little cinnabar was just beginning to show at the bottom of the shaft.

Specimens of cinnabar were taken out at the upper levels several inches thick; the individual veins, however, at the 50 feet level have narrowed to about 1 inch at thickest. Little importance attaches to this pinching or thinning because of the capricious occurrence of the cinnabar. Bunches of greater thickness are certain to be met with at intervals where vughs or cavities have formed in the country.

From the 50 feet level a start had just been made to crosscut southerly in the direction of the 20 feet shaft. The first shot had broken off a thin skelp from the side of the shaft, which revealed thin veins and faint impregnations of cinnabar traversing and colouring the felsite country. The actual thickness of the orebody at this point cannot, therefore, be determined until the drive has been extended. A crosscut in the opposite direction would also, perhaps, reveal an extension of the cinnabar in the country.

At the 20 feet shaft the cinnabar, quartz, and calcite form the filling of a contact fissure between an intrusion of augite diorite, and the felsite. The cinnabar in the best specimens averages, perhaps, 1 inch in thickness in this vein.

Probable Mode of Occurrence of the Cinnabar.

As far as the limited amount of prospecting will allow of an opinion being formed, it appears probable that three or more parallel bands of felsite occur containing veins and impregnations of cinnabar.

The ore band on the 50 feet shaft is evidently distinct from that in the main line of outcrop, which strikes about 52 feet south of the shaft, because the felsite in that outcrop, as exposed at the opening marked (C), is but 7 feet thick between well-defined hornblende granite walls.

A third band is represented at the 20 feet shaft and possibly a fourth in the most northern line of openings.

Nature of the Country or Enclosing Rocks.

Characteristic specimens of the country were selected and forwarded to the Geological Survey Office for petro-graphical examination and determination. The following notes upon them have been kindly supplied by the Curator and Mineralogist, Mr. Card, A.R.S.M.:—

"Three types of rocks are comprised:—

(A).—Fine grained felsite of a greenish colour, weathering brown when fresh. This is the principal cinnabar-bearing rock, the ore occurring in veins and spots closely associated with quartz, and to a less extent calcite. These three minerals—cinnabar, quartz, and calcite—are of secondary origin; they do not occur in fresh, unaltered felsite, but their presence is always correlated with a general alteration of that rock. Pyrites are very generally present, but does not appear to possess any significance with regard to the origin of the cinnabar ore.

"(B).—A holocrystalline rock marked 'country.' This consists of quartz, felspar, orthoclase, and much ologoclase, hornblende, and a little magnetite. May be classed as hornblende granite.

"A much altered form of this rock is of great interest in that the alteration has been accompanied by an introduction of cinnabar, which occurs in small particles within the decomposed felspar, and more abundantly along the divisional planes of the hornblende.

"(C).—Two specimens of fine-grained augite-diorite from No. 2 shaft."

Mr. Card's opinion as to the secondary nature of the cinnabar and associated mineral in the felsite and hornblende granite, derived from microscopic examination of selected specimens, is entirely confirmatory of the decision I arrived at in the field.

Though the cinnabar is mainly confined to the felsite bands, yet evidence is not wanting, macroscopic as well as microscopic, of a certain amount of impregnations as of the granite itself.

The calcite and quartz occur in veins as well as impregnating the mass of the altered felsite. Small vughs occur which are lined with crystal facets of the calcite. It is noticeable that when the cinnabar occurs as a vein, no matter how thin, it is entirely associated with the quartz, and separate from the calcite. In no instance in the vein specimens collected could cinnabar be detected in the calcite. The quartz filling the veins has a translucent appearance, passing almost into clear, glassy transparency near the metallic vein minerals. Its outer surfaces form a series of mamilliary curves covered with free terminating crystals. On these the calcite has been deposited. Part of the calcite is dark greenish-black; the colouring may be due to chlorite from decomposition of hornblende.

The felsite in its normal condition is very fine grained and greenish in colour, breaking with a cherty conchoidal fracture. Pyrites is fairly abundant in it. Where decomposition has been set up the texture of the rock has become more coarsely crystalline in appearance owing to the replacement of portion of the fine felspathic material by crystalline calcite. The extent of the replacement may be judged from the following determination of the lime in an average specimen of felsite from the bottom of the 50 feet shaft, equal lime (Ca. O.), 11·70 per cent.; equal to carbonate of lime, 20·89 per cent.

Nature of the Ore.

Associated with the cinnabar is an almost tin-white mineral weathering bronze containing copper, antimony, and sulphur. The copper carbonates, which occur in small quantity in the upper levels, have resulted from the oxidation of the mineral. The association of the latter with the cinnabar is too intimate to allow of the perfect separation necessary for adequate test for mercury in it. A complete analysis, however, of the mixed ore has been made by the analyst to the department, Mr. J. C. H. Mingaye, F.C.S., with the following results:—

Chemical Composition.

Metallic Mercury	43·68
Metallic Copper	6·87
Metallic Antimony	4·44
Metallic Arsenic	Trace
Metallic Iron	·45
Alumina	Trace
Lime (Ca. O)	1·26
Magnesia (Mg. O)	·21
*Gangue	30·46
Sulphur	11·46
Carbon Acid	·44
Moisture at 100° C.	·25
	99·52

Fine silver at the rate of 9 ounces 6 dwts. 4 grains per ton; fine gold a trace. (under 2 dwts.) No tellurium or selenium detected.

The copper-bearing mineral penetrates the vein quartz in wedge or cone-shape forms. Mr. Card, who examined all the specimens selected prior to my return, suggests that it may be a mercurial fahlerz; further exploration may furnish sufficiently pure specimens for actual determination.

The first specimen of cinnabar from the Yulgilbar deposit assayed in the departmental laboratory yielded:—

Metallic mercury, 60·70 per cent.
Silver, 6 ounces 10 dwts. 15 grains per ton.
Gold, a trace (under 2 dwts. per ton).

This sample represented the highest grade ore in the principal vein near the surface of the main 50 feet shaft. The following samples were selected by myself from a band of decomposed felsite about 7 feet thick, in the small opening at the spot marked (C) on plan (4057). "Picked" decomposed felsitic material forming horizontal pink layers from 1 to 2 inches thick in a vertical section of 3 feet 6 inches.

Metallic mercury, ·48 per cent.
Copper, a minute trace.
Neither gold or silver.

(4058.) "Average" decomposed felsitic material being an average sample selected from the full thickness in the above section.

Metallic mercury, ·50 per cent.
Copper, a minute trace.
Neither gold or silver.

From the pink colour of the horizontal layers a much higher yield would have been anticipated from the "picked" sample than from the average of the whole thickness.

The cinnabar in the soft decomposed felsite must be in a very fine state of division, for its presence is only detected by a faint pinkish tinge imparted to the matrix. Possibly portion of the cinnabar may have been removed during the decomposition and weathering, as a sample of undecomposed felsite, having a pink tinge from included cinnabar, from No. 2 shaft yielded as follows:—(4056) "Lump."

Metallic mercury, 1·58 per cent.
Copper, a minute trace.
Neither gold or silver.

Hence it is reasonable to expect a higher yield from the undecomposed felsite at a depth at the spot marked (C) on plan.

Origin of the Cinnabar.

Field observation and microscopic examination alike agree as to the deposition of the cinnabar from solution in silico-calcareous waters which percolated through definite cracks or fissures, and soaked laterally into the country as the corroding solution attacked is more soluble constituents and replaced them chiefly from the calcium or lime salts in solution.

It would, however, be premature to offer an opinion as to whether the mercury salts had a deep seated extraneous source or were originally leached in minute quantities from the contiguous or underlying granite and redeposited in the way described.

Ore at Grass.

Some of the richest patches of ore have been bagged, but little care has been taken with the bulk of the stone raised from the shafts, hence any estimate of quantity of workable ore—fixing 5 per cent. as the maximum in this case—would be very approximate only. It is certain, however, that a fair proportion of the above grade ore could still be called from the waste.

Further Prospecting.

The crucial question at the present moment, however, is—What quantity of workable ore is likely to be available in the mine? A question which requires a practical answer such as systematic prospecting alone can give.

Conclusion.

I am of opinion from the mode of occurrence that the cinnabar is likely to continue to great depths, but whether in sufficiently concentrated form to pay for extraction, prospecting alone can prove.

The conditions of occurrence differ from those of the very few paying mercury mines of the world, yet the prospect of developing a paying deposit of moderate extent is decidedly encouraging and certainly superior to any yet obtained in the colony.

As the existence of a payable mercury mine in Australia would be of first importance in such a gold-bearing country, I am of opinion that a share of the cost of proving comes well within the scope of the prospecting vote.—*Australian Mining Standard.*

† T. W. E. David, Prospecting Board Papers, 91, 276.
‡ These occurrences are evidently based on verbal or non-published reports hence the references are non-committal.—J.E.C.
§ Annual Report Department of Mines, N.S.W., for 1889, page 103.

* Chiefly silica.

TIN TICKETING.

THE fortnightly ticketing for tin ores was held at Tabb's Hotel, Redruth, on Tuesday. Result:—

VALUES OF ORES SOLD FROM EACH MINE.

Mines	Tons cwts.	Per ton. £ s. d.	Value. £ s. d.
Dolcoath No. 1	14 0	36 17 6	516 5 0
do No. 1a	14 0	37 5 0	521 10 0
do No. 1b	12 0	37 7 6	448 10 0
Wheal Grenville A	18 0	38 10 0	693 0 0
do B	15 0	38 2 6	571 17 6
do No. 2	4 0	22 12 6	90 10 0
East Pool A	13 0	26 12 6	346 2 6
do B	12 0	25 15 0	309 0 0
do No 2	1 10	11 7 6	17 1 3
Tincroft	10 0	31 7 6	313 15 0
do	9 0	31 17 6	282 7 6
Carn Brea No. 1	8 0	33 5 0	266 0 0
do No. 1a	7 0	33 7 6	233 12 6
do No. 2	1 0	21 0 0	21 0 0
Basset Mines (Limited)	14 0	38 7 6	537 5 0
Killifreth	14 0	37 2 6	519 15 0
West Kitty	13 0	38 12 6	502 2 6
Phœnix United	9 0	37 12 6	338 12 6
Wheal Kitty	7 0	37 15 0	264 5 0
South Condurrow	6 0	38 12 6	231 15 0
	201 10		£7024 6

AVERAGE PRICE PER TON, £34 17s. 2d.

AVERAGE PRICES PER TON.

March 10	£35 5 10	April 8	£34 12 0
March 24	35 4 1	April 21	34 17 2

VALUE OF ORES PURCHASED BY EACH FIRM.

	Tons.	£ s. d.
Carvedras	34 5–6	1282 13 9
Chyandour	54 10	1954 17 11
Williams	30 0	1135 15 0
Redruth	19 1–6	607 17 11
Penpoll	19 0	596 2 6
Cornish	44 0	1446 19 2
	201 10	£7024 6 3

The next tin ticketing will be held at 11 a.m., instead of 11.30 am

BRITISH COAL IN EGYPT.—A Foreign Office report from Cairo states that the import of coal, not in transit, which in 1894 reached a total value of nearly £500,000, is almost exclusively from Great Britain. There is a small quantity of coal briquettes imported from Belgium, but it does not enter into serious competition, and Great Britain continues to supply from 96 to 97 per cent. of the total import. The demand for coal has increased enormously of late years, the total import in 1881 for consumption in the country being 352,604 tons, as against 469,795 tons in 1891, and 662,536 tons in 1894. The upward tendency was slightly arrested in 1893, owing to the strikes in England, and during that year the import of coal briquettes from Belgium consequently increased, but in 1894 things returned to their normal condition. Although practically all the coal imported into Egypt is of English origin, a great part of the trade is in foreign hands, especially at Port Said, where more than one-half the business is done by French firms, who, of course, have a monopoly of the coaling of French ships passing the canal. As the import of coal increases, the supply of charcoal from Turkey and Cyprus decreases proportional.

GOLDEN NEW ZEALAND.

HISTORY OF THE PAST YEAR.

Statement by the Minister of Mines.

(*Continued from page* 487.)

Coal Mining.

THE coal mining industry is steadily increasing, but, as mentioned in my last statement, the output from the mines depends entirely on the consumption within the colony. No foreign market has yet been found as an outlet for our coal, and until coal can be disposed of outside the colony, we cannot expect a large increase in the output from the mines. Although there are a large number of mines opened up, the class of coal suitable for export is confined to very few of them. The best bituminous coal mines are restricted to the West Coast of the Middle Island. The other mines from which coal can be got suitable for marine purposes are at Hikurangi, Kawakawa, and Ngunguru, in the northern portion of the Auckland Province, but the coal from these mines is decidedly inferior to the bituminous coal found in the Middle Island. The coal from the Waikato mines, and also from the mines in Canterbury and Otago, is only suitable for household purposes and local industrial consumption. The West Coast must, therefore, be looked on as the only place where mines are as yet opened from which coal can be obtained to supply foreign markets.

The total output from the mines of the colony last year was 719,546 tons, while for the former year it was 691,548 tons. This shows an increase in the output last year of 27,998 tons. The coal imported last year amounted to 112,961 tons, as against 117,441 tons for the previous year—a decrease last year of 4483 tons. Of the coal imported, 2079 tons came from the United Kingdom, 110,180 tons from New South Wales, 701 tons from Queensland, and 1 ton from Victoria. The total quantity exported was 79,943 tons, of which 75,004 tons was from New Zealand mines, and the balance from coal imported from other countries. Of the quantity exported, 54,494 tons was used in coaling direct steamers leaving for the United Kingdom, and accordingly may be treated as consumption within the colony, as the employment of these steamers depends entirely on the growth of traffic springing up between New Zealand and the home country. Therefore, on this basis, the consumption of coal within the colony last year should be reckoned as 807,058 tons, as against 784,704 tons for the previous year—an increased consumption of 22,354 tons, which, I think, indicates the steady growth of other industries.

Taking the quantity of coal imported last year, the following will show the ports the coal was delivered at—namely, Auckland, 27,798 tons; Wellington, 15,542 tons; Christchurch, 37,172 tons; Dunedin, 6063 tons; Napier, 5573 tons; Nelson, 519 tons; Invercargill, 1245 tons; Wanganui, 1976 tons; Timaru, 7996 tons; Oamaru, 2562 tons; Poverty Bay, 1144 tons; New Plymouth, 123 tons; Picton, 687 tons; and Kaipara, 1780 tons.

Taking the different classes of coal produced last year, there were 418,895 tons of bituminous coal, 102,389 tons of pitch coal, 170,825 tons of brown coal, and 27,753 tons of lignite. The increased production last year was 37,688 tons of bituminous coal, 14,861 tons of brown coal, and 4331 tons of lignite, while there was a decrease in the production of pitch coal of 28,682 tons.

The mines with the largest output were: The Westport Colliery, 215,770 tons; Brunner, 121,185 tons; Kaitangata, 67,091 tons; Taupiri Extended, 30,426 tons; Blackball, 27,060 tons; Allandale, 19,442 tons; Walton Park, 19,282 tons; Shag Point, 15,082 tons; Taupiri Reserve, 13,877 tons; Karipaka, 13,655 tons; Hakanui, 12,690 tons, the output from each of the other mines in the colony being under 12,000 tons.

Two new mines are being opened up: One at Granity Creek, belonging to the Westport Company; and the other at Coal Creek, belonging to the Greymouth Point Elizabeth Railway and Coal Company. These mines, when opened up, will be capable of supplying a large quantity of coal. The Blackball Mine is now in fair working order, and is capable of a considerable output should the demand for coal increase. The available coal in the Brunner Mine is now ascertained, from the prospecting operations which were carried on last year, to be confined to a semi-circular area. The thinning of the coal takes place at different parts, and the strata overlying the coal at the different points indicate that a considerable disturbance or crushing action has at one time taken place, and that a seam of sufficient thickness, if found, must be a considerable distance further back towards the Coal Creek lease. It is expected that, unless coal is found in other parts of the Brunner lease, any large output from this mine can only be expected to last for about a couple of years.

Earnings of the Coal Miners.

The earnings of the coal miners cannot be accurately ascertained, for the reason that in the principal mines the employment is intermittent, the output at the mines being dependent on vessels to take away the coal. The storage at the large mines is comparatively small in proportion to the number of men employed. When they can be fully employed the men earn high wages; but sometimes they are off work for two and three days a week. If there was sufficient storage at the mines, a less number of miners would be sufficient to produce coal to supply the demand, but without storage this cannot be done, as vessels coming into the ports of Westport and Greymouth require to be loaded as fast as possible.

In former years the rate of computation has been based on a labour cost of 6s. per ton produced—that is, the cost of hewing, trucking, and haulage; and, taking into consideration the amount of dead work which has to be done in every mine, this seems a fair basis of computation. The output last year being 719,546 tons, and 1899 men being employed in connection with the mines, it would make the average earnings of the miners £113 13s. 5d. a man per annum, or about £2 3s. 9d. per week.

Accidents in Coal Mines.

I have to regret to state that, notwithstanding the strict supervision enforced by legislation for the security of the workmen employed in mines, it seems almost impossible to attain an immunity from accidents. Last year five fatal accidents occurred, and in each instance no blame could be attributed to any one. No better system of supervision can be exercised than by the workmen themselves, as they are daily in the different working faces, and if they see the slightest relaxation of their employers in providing for their health and safety, on their acquainting the Inspector of Mines, it is the duty of that officer to act upon the information given him, and to see that any just cause of complaint in regard to safety is immediately attended to.

Metalliferous Mining.

Although there are a considerable variety of minerals in the colony, very little has been yet done to develop them. Nearly all our attention has been given to gold, silver, and coal. In the northern portion of the Auckland district a small quantity of manganese ore is shipped every year, but the low price of this mineral will only permit it to be worked at a profit when the deposit is found close to the sea board, where it can be loaded into vessels direct. During the last year 534 tons were exported, having a value of £1156, which is equal to about £2 3s. 3d. per ton.

About 44 tons of antimony was exported last year from the Endeavour Inlet Mine, representing a value of £761, but there does not appear to be sufficient inducement to carry on extensive operations. It is only where rich ore is found that mines can at present be worked at a profit, as the price of antimony is very low.

At Ohaeawai an English syndicate has spent a considerable amount of money in prospecting for cinnabar, and some fairly rich ore has been found, but the large emissions of gas which is seen bubbling and hissing out of the surface of the ground in the vicinity of the workings, together with hot springs, will render the working of any lode in this locality a difficult and hazardous undertaking. In digging up the surface, beds of shaly or peaty formation containing petroleum are met with. On the top of this deposit, and in some places intermixed with it, small globules of quicksilver are found, which have been distilled from the ore by the heat of the earth. No doubt a considerable quantity of quicksilver exists in this locality, but it seems questionable whether it can be profitably worked without plenty of capital.

Kauri Gum.

The production of this article of commerce seems to increase every year. There was 8338 tons exported last year as against 8317 tons for the year previously, but the average value of the product last year was considerably less than the former year, as the total value was only £404,567, whereas for the year 1893 it was £510,775, showing a falling off in the value to the extent of £106,208. The average value last year was only £48 10s. 5d. per ton, whereas for the previous year the average value was £61 18s. 3d. per ton. The number of people engaged in this industry cannot well be ascertained, but it is known to be the means of providing a livelihood for a large population of both Europeans and Maoris. At the same time, their average earnings must be very small. The best class of gum is naturally becoming scarcer every year, or, at least, it requires more work to find it; but, although the kauri gum must in the course of time become exhausted, many years will yet elapse before this takes place.

Roads and Tracks.

The great necessity for the construction of roads and tracks becomes plainer every year. Fresh discoveries are constantly being made, requiring means of transit of tools, provisions, and machinery. The broken character of the country in which mining, in a great many places, is carried on, almost requires a road constructed up every valley or ravine to get supplies brought to mining claims. The more discoveries that are made the greater the want of roads will be. A considerable sum has already been expended, and still very little is yet done to open out the back country.

The estimated cost of roads and tracks authorised to be constructed last year was £21,595, and the actual expenditure was £15,160 by direct grants, and £2295 by subsidies; and the liability on works of this character on March 31 last was £20,687. During the last 13 years that the votes for this purpose have been under the control of the Mines Department, the expenditure by Government has amounted to £155,188 in direct grants, and £77,309 by subsidies to local bodies.

Water Races.

As I have already remarked, a large supply of water is essential to the successful working of the alluvial drifts. Although there are very large areas covered with a great depth of these drifts, it is only in very few localities that the auriferous layers will yield remunerative returns, considering the cost of driving and timbering. Large quantities of material require to be operated on at a minimum cost, and this can only be done with a good water supply. This necessitates either the construction of large water races or extensive reservoirs, and in many instances both of these have to be constructed so as to insure a constant supply of water. The whole of the streams in the immediate locality of the gold workings are at present utilised, and still they are quite inadequate to supply the demand for water. As water races of a costly character will have, in the future, to be constructed to bring in water from the main rivers, provision has been made in the regulations under the Mining Act for granting one-third the cost of construction of water races having a carrying capacity of 20 sluicing heads and upwards, when it is shown that water is required to supply men having mining claims in the locality, and that the price charged for water from such a supply will be reasonable.

The water races constructed by the Government and now working entirely under the control of the Mines Department, are the Waimea-Kumara and the Mount Ida water races. These have proved a great boon to the mining community, and have been the means of finding profitable employment for a large number of people, many of whom, had these water races not been constructed, would have left the colony for other fields. During the last 16 years the average number of men working mining claims by the aid of these water races has been 517, and, as each of these men has either a family or some one depending on him for support, it may be asserted that these water races have been the means of providing a livelihood for a population of about 2585 persons.

The total cost of the construction of the water races worked under the control of the Department was £348,214. The approximate value of gold obtained from claims worked with water from these supplies is £1,274,082, and the net profit on the working, including the amount paid in gold duty before it was abolished in the Middle Island, was £82,150.

The net profit on the working of the Waimea-Kumara water race for the last year was £2596 13s. 5d. Extensions and deviations now require to be constructed to open up new ground, and also to dispense with a long flume on the Waimea portion of the race which is now totally decayed. These works have been undertaken, and during the last year there was an expenditure of £1049 incurred upon them, and it will yet take about £4000 to complete them. When these extensions and deviations are completed the cost of maintenance will not only be cheapened, but a considerable area of new ground will be opened up, which will increase the revenue from the races, and very little expenditure will be required for further extensions for a considerable time. There was no expenditure upon the Mount Ida water race last year beyond the ordinary cost of maintenance, and, notwithstanding the extremely dry season, there was a net profit of £15. The Blackstone Hill water race, which was purchased two years ago from the Official Assignee for £1000, continues to give good returns for the money invested. During the last year £37 was expended in making some alterations, which now brings up the cost to £1037, and the net profit on last year's transactions was over £129; equal to nearly 12½ per cent. on the capital cost. Taking the whole of the water races controlled by the department last year, there was a net profit of £2740 19s. 3d.

The total revenue derived from the water races last year was: Waimea-Kumara £5635, while the expenditure on maintenance amounted to £3038; the revenue from Mount Ida was £1067, and the expenditure £1052; and from the Blackstone Hill race the revenue was £136, while the cost of maintenance was only £7.

(*To be continued.*)

SIDE LIGHTS ON THE LAW:

Legal Jottings on Cases in the Courts, and on Questions affecting Mining, Railway, Financial, Industrial, and allied Interests.

BY A BARRISTER.

THE Courts in the Queen's Bench Division are again all in full swing, after an interval of nearly 10 months. A long list of special jury actions await trial, and it is doubtful if the list will be cleared in the short period that is allotted before most of the judges are again called away for circuit business. Liverpool and other cities are clamouring for continuous sittings for the trial of their actions. As the arrangements now exist, judges are sent to Liverpool four times a year, and clear the list of actions set down for trial. Yet the northerners are not content. One wonders what they would say if they lived in the capital. They may have to wait three months for judges to come to try their causes, but they know that in a definite time their cases will be heard. No such certainty exists for the Londoner. With the special jury actions now awaiting trial in London and Middlesex much progress will no doubt be made within the next two months, but it is more than doubtful if the list will be cleared, and then will come the dreary period of 10 months, during which time special jury actions will be taken in driblets, as a judge or judges can be spared for the purpose. Time was when all the judges sat for months together in the capital and cleared the lists, and then arranged twice a year to go on circuit. But this was more than 20 years ago. Since then the circuits have commanded the judges attention; the country has paid additionally for it, but the capital city has had to put up with the inconvenience. Other large cities have got more than fair attention, and are still not satisfied, and the lesser county towns have had the privilege of seeing the judges who wear the red and ermine thrice instead of twice a year, and wondered why they have come, for they could find them little or nothing to try.

LONG before the institution of the Commercial Court I suggested that use might be made of the commercial knowledge and experience on the Bench for the trial of commercial causes, and I went so far as to suggest the name of two judges who were specially fitted for the purpose. One of these has since been promoted to the Court of Appeal; the other is now often known as the Commercial Judge. There is still room for improvement in the arrangement of business in the Queen's Bench Division. The success attending the establishment of the Commercial Court is in fact due to the fact that a certain regularity and continuity in the hearing of the causes has taken place. Nothing is so wasteful of the time of the judges than the system still in vogue in the Queen's Bench Division by which judges are taken off the continuous sitting and sent to do odd jobs elsewhere. Solicitors and litigants are equally in doubt when their cases are likely to be reached. When at last cases have appeared in the day's list the chances have been that the list was too long, and before it was finished the judge was sent elsewhere to try some case on circuit, at the Old Bailey, an election petition, or elsewhere. An attempt is being made to remedy this. Of the 15 Queen's Bench judges, one (Mr. Justice Mathew), will try commercial cases. Five will be sitting in Divisional Courts, five will be trying actions, one sitting in Bankruptcy, one in Chambers, and one in the Railway and Canal Commission Court part of the time, and the remainder on circuit. The remaining judge of the 15 is still away ill. It would be well if the five judges appointed to try actions were each to have their appointed list. This has been done with great success in the Probate Court. It has greatly expedited business, and solicitors are enabled to guage with more or less accuracy when their cases will be reached. So well has that Court got up with its business that frequently the case appears in the day's list for hearing on the very earliest day after the expiration of the notice of trial. It is difficult to see why at the beginning of each sittings the judges selected to try actions should not each have a list appropriated to him, or why he should not continue to sit daily till he finished. Other judges might be deputed to do the odd jobs, like attending the Old Bailey and elsewhere.

IF members of a partnership leave in the hands of one of their number the management of the business of the firm, it is only right to assume that he has the right to act in reference to any ordinary incident that may arise in the course of business. To enter into the ordinary contracts of the firm, of course, would be one of the necessary incidents of the position, and as he may thereby incur a liability, he and the firm may be liable to be sued in respect thereof. Is such a partner entitled when the firm is sued to instruct a solicitor to enter an appearance on behalf of the firm—that is to say, on behalf of the other individual members of the firm as well as of himself? The Court of Appeal has held that there is such an implied authority, and that the solicitor, moreover, is not bound, should judgment go against the firm in the action, to inform each individual member of the firm of the fact, but has the right to assume that, if he informs the managing partner, the latter will notify to his co-partners the result of the proceeding.

So much voluntary work is done nowadays, and so many people are interested as members of, or are on the committee of what are known as voluntary societies, that the rights and liabilities of members are of general interest. Considering the amount of work transacted by such societies, it is, at least, remarkable how seldom they figure in the Courts, and how little is known of the law by which they are governed. A licensed victualler under the rules of a trade protection society had been elected a member, and had paid the annual subscription of 10s. 6d. a year, under the rules of the society, and was entitled, under certain conditions, to assistance from the society's solicitor. The committee had under the rules power to set aside moneys out of the subscriptions towards a benevolent fund for the relief of the necessities of aged and decayed members of the society. For some reason or other he sent a letter to the committee withdrawing from membership of the society. After this had reached the secretary, and before it had been acknowledged or accepted by the committee, he changed his mind and wished to withdraw his resignation. The committee, however, refused to allow him, contending that he must first seek re-election. The licensed victualler upon this sought the assistance of a court of law to restrain the committee from excluding him from his membership of the society. Although Mr. Justice Kekewich was of opinion that till accepted the resignation could be withdrawn, the Court of Appeal has laid it down as the clear right of every member of a voluntary society who has paid his subscription for the current year to withdraw at once by signifying his intention to the proper officer who conducts the affairs of the society, and in the absence of special provisions in the rules the resignation takes effect at once, and the membership ceases. In the case in question the Court held that the committee was right, and could not admit him to membership again without his submitting to re-election.

MEETINGS OF MINING COMPANIES.

GRASKOP, LIMITED.

The third ordinary general meeting of the shareholders in Graskop (Limited) took place at Winchester House, on Wednesday, Sir E. ROBERT P. EDGCUMBE (Chairman of the company) presiding.

The SECRETARY (Mr. W. Watkins) read the notice convening the meeting.

The CHAIRMAN, in moving the adoption of the report and accounts, said the shareholders would notice in the balance-sheet that the capital now appeared as £125,000, against £100,000 a year ago. Twelve months back they were considerably overdrawn, and had extensive liabilities, owing to their having incurred expenses which were not anticipated at the time of the formation of the new company. The great difficulty the directors had to face was how to meet those liabilities without going to the shareholders. When they last met he had the satisfaction of telling them that the board saw their way to an advance of £10,000, and he would explain to them how that operation was carried through. At the time they negotiated that advance their shares were standing in the market at about 1s. 10d. to 1s. 11d. They had then 100,000 5s. shares unissued, which represented £25,000, and their difficulty was how to convert those shares into cash for the purposes of the company without saddling the shareholders with a heavy prior liability in the form of debentures. The way in which they were able to accomplish that was by going to a company, which, after prolonged negotiations, offered to advance £10,000 on condition that the Graskop gave them £25,000 in debentures, with the option of converting those debentures into 100,000 shares if the interest was not met. As the shareholders were probably aware, the English law prevented the issue of shares at a discount, although it was permissible to issue debentures at a discount. The best they could do for the company at the moment was to get practically 2s. per share for the unissued shares, and they were also able to introduce a clause by means of which the moment their shares reached par this advance was to cease, and the Graskop was empowered to sell any remnant of the 100,000 shares which were in their hands. That had turned out very satisfactorily, because the other company which had come to their assistance did not want to be burdened with £10,000 of their debentures; while they, on their part, did not think it in the interest of the Graskop that those debentures should exist. If they turned to the balance sheet they would see that instead of having to write up £15,000—the difference between £25,000, the nominal par value of the shares, and the £10,000 which they received—they had really had to write up less than £10,000. When about 70,000 of the shares were sold, their shares had reached a point when they themselves were able to market them. They then sold 30,000 shares at 5s. and upwards, the consequence being that they obtained in return for the debentures they issued over £15,000 in cash, which had really been the salvation of the company. (Applause.) The actual figures showed that when they issued the last 30,000 shares on their own account they made a premium of nearly £1000. That accounted for the change in the amount of the capital, and for the fact that the company was now in funds and able to meet all its liabilities without having any prior charge in advance of their shares for interest or anything else. That was what they had been aiming at, and they considered the result highly satisfactory to the company. With regard to the balance-sheet, the figures were natural, and not unduly large in any case. The expenditure had been increased considerably on the other side during the past 12 months, while, on the other hand, they had realised a sum of £1800 in the form of gold, which was a satisfactory change. The Chairman then pointed out that the balance-sheet covered a period of 15 months. The expenditure in London, he continued, had been very moderate, and the transfer fees had appreciably increased. On December 31 the cash at the bank was £2125, while at the present time the cash balance was even greater, which showed that they were getting into a very satisfactory position. In regard to the mining operations, when the company was reconstituted, the aim they had in view was to start good mills for the purpose of crushing the ore, and thus extracting the gold. But, as time passed on, it had been more and more borne in upon them, from the unsatisfactory returns of the trial experiments at the mill, that the ordinary system of milling did not suit their ore. In that matter they were not peculiar, for a large number of mines in the district were in a similar position. The difficulty was that the ore became slimy, and although they might, on assay, find their ore to be worth from 12 dwts. to 14 dwts., yet after it had been put through the mill only 4 or 5 dwts. were extracted. There was, obviously, therefore, some difficulty in treating it in that way. They found that the cyanide process was the better adapted to their ore, and although further delay and expense were entailed in erecting cyanide plant, the board felt that it would be better in the end. Writing on December 12, after the first month of returns under the cyanide treatment, their manager said:—"I think the treatment is successful so far, and I am continuing to go on with it, and am making the alterations necessary as we go on. I am glad to say we have also reduced the consumption of cyanide from that quoted by Mr. Yates in his report. No doubt we shall be able in time to bring down the cost and time of treatment materially." Mr. Yates, in his report of November 29 last, said:—"The extraction obtained" (by the system of milling) "has been very low, seldom reaching even 50 per cent. The mill is run by water power, and a good supply of water is available." He went on to say that "the erection of a cyanide plant was practically completed a month back, and the first trial it was put to was using two of the vats as intermediaries, with the idea of obtaining tailings free from slime for cyanide treatment." Again he said:—"The excessive amount of slime produced by the stamps clearly indicates that battery treatment is not advisable as a preliminary to cyanidation of this ore," and, "Apart from other considerations, the powdery state of the bulk of the ore as it comes from the mine is itself an inducement to apply another method of extraction—namely, direct cyanidation." A new process of cyaniding had been adopted, which was quicker and less expensive than the old process, and Mr. Yates went on to say that the percentage of extraction under that process was good, ranging from 75 to 90 per cent., as against less than 50 per cent. by the mills. Mr. Yates afterwards said:—"From the result of this trial it would appear that direct cyanidation is destined to be a success on this particular ore. If any difficulty is experienced, it will probably be in connection with the leaching rate. . . . A glance at the figures shows that passing the cyanide residues through the battery resulted in raising the extraction from 80 to 90 per cent. An extraction of ¼ dwt. per ton covers milling expenses. If, therefore, anything above this could be extracted by amalgamation from the cyanide residues it would pay to pass them through the mill rather than discharge them into the sprult." These were extracts from a long and careful report by Mr. Yates. He also had a report by Mr. Garbe, under date of January 4, in which he said:—"We have succeeded in getting out a larger percentage of ore than any neighbouring companies." The Chairman thought, therefore, that the shareholders would agree with him that they had now got upon satisfactory lines in dealing with the ore. (Hear, hear,) To both his fellow-directors and himself it was a very great satisfaction to feel that, after working on gradually from time to time, they had now at last apparently found out the system by which this particular class of ore could be satisfactorily dealt with. He also wished to mention that their late manager—Mr. Powter—had left them, having found employment elsewhere. In his place they had engaged Mr. Siebel, who had, so far as they were able to judge, every qualification for carrying on the work. With regard to the position of the company generally, as the shareholders were aware, they possessed a territory of more than 8000 acres, which was largely auriferous. This territory was so large that they had never been able to deal with more than small portions of it themselves. It seemed, therefore, desirable to the board that portions of this territory should be leased off to other companies who could work it, and he was glad to say that two companies had availed themselves of the options offered by the Graskop Company. This was an enormous advantage to them, because they retained one third interest in each of the companies, and, on the other hand, it cost them nothing for development. Not only that, but they would be relieved very considerably from the annual rent which they had to pay to the Transvaal Government, the result being that at the present time the Graskop was only paying £400 a year for its remaining property of more than 6 square miles. He thought they would agree with him that that was a matter for congratulation. (Applause.) With regard to the dynamite monopoly, that was a matter which did not concern them, owing to the gravelly nature of the soil on the property. A danger, however, with which they had been threatened was an attempted monopoly in cyanide, which had fortunately been defeated, he hoped, permanently. An attempt had also been made by the cyanide companies to enforce a claim for royalties where the cyanide process was used, and to establish patent rights. The English Courts had held that there was no patent in the process, which was an old and well known one, and the cyanide companies had now entered the Transvaal Courts with a view to endeavouring to induce them to establish such a claim. The matter was still *sub judice*, but he was disposed to think the Transvaal Courts would adopt the same view as that held by the English Courts. The Transvaal Government had recently doubled the tax upon mealies, which constituted the chief food of the Kaffir workers at the mine, and this to some extent increased the expenditure on maintenance. In this connection the speaker remarked upon the necessity of the British Government protecting with a firm hand the interests of British citizens abroad, and he concluded by moving the adoption of the report and balance-sheet.

Mr. J. A. TRAVERS seconded the resolution, and it was carried unanimously.

The CHAIRMAN said the next resolution to be proposed related to the adverse balance of £789 17s. 3d. Unless this amount was transferred to the lease of property account they would have to deduct it, in the event of their desire to pay a dividend from the sum available for that purpose. The directors thought this was a proper expense in connection with the development of the property, and, therefore, recommended the alteration.

Mr. GROVER then moved:—"That the sum of £789 17s. 3d., appearing in the balance-sheet under the head of expenditure in London, be transferred to the lease of property account."

The resolution was seconded and carried *nem. con.*

Mr. E. R. CUMMINS moved the re-election of Sir E. Robert P. Edgcumbe as a director.

Mr. TRAVERS seconded the motion, and it was agreed to.

The auditors, Messrs Woodthorpe, Bevan, and Co., were reappointed, and a vote of thanks to the Chairman concluded the meeting.

THARSIS SULPHUR AND COPPER COMPANY.

The annual meeting of the shareholders in the Tharsis Sulphur and Copper Company was held on Wednesday, in the Merchants' House, Glasgow, Sir CHARLES TENNANT presiding.

The CHAIRMAN, in moving the adoption of the report, said: Gentlemen—Considering the comparatively low prices which have ruled for both sulphur and copper, I look on it as one of the best and most encouraging reports we have ever laid before you. We are reaping the benefits which accrue from long experience and wise and careful administration in every department, and from the prudent policy we have all along adopted of steadily writing down the value of our assets both in Spain and this country. The result has been, notwithstanding the somewhat reduced copper contents of our ore, that after again writing off, in addition to our usual depreciations, the further sums off £20,000 from the mines, £20,000 from the railways and pier, and £3690 from Lagunazo, altogether a new charge, our net profits for 1895 are £219,491, against £125,346 in 1894, enabling us to pay you a dividend of 17½ per cent., against 10 per cent. for the previous year. We have had, as stated in our report, the great advantage of a copious rainfall throughout the year, which has increased our production of copper on the mines by 1250 tons, and at a very satisfactory cost. We have realised rather more for our refined copper and our iron ore than we did in 1894. The average price of G.M.B's was £42 19s. 7d., against £40 7s. the previous year. To these favourable circumstances, coupled with efficient and economical management, we owe the excellent results of the past year. I will now glance at the work done on the mines. The total output of mineral from the three mines has been 612,483 tons, against 588,427 tons in 1894—an increase of 24,056 tons. Both for local treatment and export the quantities raised have exceeded those of 1894. For local treatment the quantity has been 394,410 tons, against 380,065 tons—an increase of 14,345 tons; and for export 218,037 tons, against 208,362 tons—an increase of 9711 tons. Our deliveries to consumers have been 222,269 tons, against 203,010 in 1894—an increase of 19,259 tons; and the cost per ton delivered 2½d. less than in 1894. As you are aware, we now draw our supplies of export mineral almost entirely from Calanas, where are going on gradually to remove the overburden from the whole of this fine lode. It is rather a large operation, but the rate of charge for uncovering, with which we debit the mineral raised, will more than wipe out the whole of the outlay on this account. As you are aware, Tharsis has been the main source of our production of copper on the mines, from the fact of its huge waste heaps, its large cupreous drainage from the great open cast, and the ample supply of water for extraction purposes generally furnished by its two diques. When, however, Calanas has got the benefit of its new dique—which will be, I hope, about the month of July—our arrangements for the production on both mines will be very complete. As to Lagunazo, we are much pleased with our purchase. Under the able supervision of Mr. Rutherford it is becoming a fruitful source of revenue. The railway and pier have done their work admirably, without accident of any kind, and at rather a less cost per ton than in 1894. The public traffic, both passengers and goods and minerals, especially manganese, is steadily increasing. Both pier and railway and plant are in excellent order. At home the metal works under Mr. Stewart's supervision are doing extremely well. Our production of finished copper shows a satisfactory increase for the reasons explained above, while our costs compare favourably with those of 1894, and we have obtained a better price than we did that year. Of iron ore our production has been rather under that of 1894, but the deliveries have been larger, thus reducing the stock at considerably better prices than it stood in our inventories. I will now glance at our balance-sheet. Under the head of capital and liabilities you will find that the debentures—£26,500—which appeared in the 1894 balance-sheet are no longer there. We have paid them off, as we said we should do in our previous report, and thereby ended our debenture charge. The usual £500 has been added to our reserve insurance fund, which now amounts to £7500. On the other side the mines stand at £23,690 less, the railway and pier at £20,000 less, works, buildings, machinery, and plant in Spain at £11,389 less; and in Britain at £3630 less than at December 31, 1894. All these assets now stand at very satisfactory figures. Stocks in trade in Spain are lower by £33,948, and in Great Britain by £68,099, due mainly to reduced stocks of refined copper and iron ore. I will now consider our prospects for the current year, which are, I am glad to say, altogether satisfactory. Our sales of pyrites are for the same quantity and at the same price—this being the last year of the triennial contracts with the consumers of sulphur. We have renewed our contract for copper on the Chili bar basis, with the same firm and on the same terms as last year. This contract, of which we have now had three years' experience, has worked well for us, and we have had no hesitation in going on with it for another year. For the first three months of this year the quantities sold, and the average price obtained, show a satisfactory advance on the corresponding figures for the same period of last year, so that, with regard to copper, we have made a good start. Moreover the statistics of this article all point to higher prices—the prominent features being reduction of stocks and greatly increased consumption throughout the world. As to purple or iron ore, our contracts are now considerably in excess of our estimated production, and if the deliveries are taken within the specified time our stocks, by the end of the year, will be reduced by a very moderate figure. Before alluding to the one painful paragraph in our report, I should like to again express the grateful acknowledgements of your directors to the general manager, Mr. Vérel, and to our secretary, and also to Mr. Rutherford, the head of our establishments in Spain, and to their excellent staffs, for their continued able and devoted services to the interests of the company. There is, gentlemen, I grieve to add, one sad event in our history which will be identified with the year 1895. Our distinguished and beloved colleague, Monsieur Barthélemy St. Hilaire passed away on November 24, in his 91st year. In him France has lost one of her noblest citizens—one whose character and abilities commanded universal respect and admiration. Rarely, indeed, has the death of any statesman and scholar called forth from the Press of Europe and America a more unanimous expression of public appreciation and esteem. An old friend of M. Mercier, M. St. Hilaire has been a director of the Tharsis Company from the first, and took much interest in its welfare. It has been our painful duty to find a gentleman to take his place. We have been so fortunate as to secure the services of M. Eugène Desmarest, a director of the Northern of France Railway, and lately sub-Governor of the Bank of France, an old shareholder, well known and esteemed by our French colleagues. He regrets that, through indisposition, he could not be present with us to-day; and, for a similar reason, our esteemed colleague, M. Messéan, is, much to our regret, unable to be with us; but we have our old friends MM. de Berly and Schmidt, whom we welcome very heartily.

M. J. H. C. DE BERLY seconded the resolution, and it was carried.

M. LOISELLE moved the re-election of Mons. Desmarest, Mons. A. D. M. Messéan, Mr. Hugh Brown, and Mons. Louis Oscar Schmidt as directors.

Mr. GALBRAITH seconded the motion, and it was agreed to.

The auditors, Mr. Alex. Brown, C.A., and Mr. R. C. Mackenzie, C.A., were re-elected, and it was agreed that they receive £300 for their services during the past year.

This concluded the proceedings.

THE MONARCH SYNDICATE, LIMITED.

The first ordinary (statutory) general meeting of shareholders in this company was held at the company's offices, on Wednesday last, Mr. SAMUEL JENNINGS in the chair.

The SECRETARY (Mr. E. H. Young), having read the notice convening the meeting,

The CHAIRMAN said: Gentlemen—In addressing you on this occasion—the first ordinary general meeting of the Monarch Syndicate—four months after the date of registration—I must premise that we are only a new company in a technical sense, and I am, in point of fact, addressing the shareholders of the Mines Exploitation Syndicate, which has transferred its business and assets to the present syndicate in order to secure a wider scope of operation, and at the same time to provide, in due course, a more powerful working capital. It is scarcely necessary for me to remind you that our operations last year were very successful. You have received evidence of this in the tangible shape of dividends to the equivalent of about 80 per cent. of the capital paid up in the old syndicate, whilst the nominal value of the various shares and business in hand transferred to this syndicate amounted to more than 500 per cent. of your subscriptions, and this you have received in the form of an equivalent share allotment in this syndicate. I now proceed to speak of the business and prospects of the syndicate, and for convenience I will arrange my remarks under three heads:—1st. The business transferred from the Mines Exploitation Syndicate. 2nd. Business since completed; and, 3rd. Business now in hand, contemplated, and in course of negotiation. The first of these three divisions comprises the Gem of Cue Gold Mine, Murchison, W.A.; the Dunderberg Gold Mines, California; the Cripple Creek Exploitation Syndicate. Concerning each of these ventures I am glad to be able to speak with confidence. The mines are both developing splendidly, and will soon be in a position to require milling plant, as considerable bodies of good ore are under preparation that will yield satisfactory results as soon as the necessary machinery has been furnished. I have recently received a very interesting letter from Mr. Timperley, who has visited the Gem of Cue Mine. Mr. Timperley is a gentleman we know well, and his opinion on mining matters carries considerable weight. This is what he says:—"Depth has proved the Gem of Cue to be one of the soundest properties about here. I was agreeably surprised at the amount of work and the systematic way in which it has been done; also at the strong and well-defined nature of the lode—they have been raising some wonderfully good stone lately from the 108 feet level, gold showing very freely to the naked eye, and the reef a nice size—altogether prospects look very bright." In the Dunderberg Mine, also, development is going on in a most encouraging manner; further driving has opened up fresh stoping ground, some of the ore running as high as 4 ounces gold to the ton, and we are expecting to hear by every mail that a suitable mill has been secured locally at a reasonable cost that will enable us to get to profitable work in the course of the summer. Our interest in this mine is very considerable, and I look upon the investment as one of exceptional value for early profit. During the past six months our attention has been mainly occupied by Cripple Creek. Nothing that has been said regarding the marvellous riches and extraordinary development of this district requires toning down. Having formed the Cripple Creek Exploitation Syndicate, our first care was to obtain absolutely reliable information, and at the request of your board, our managing director and consulting engineer, Mr. Walton, visited the district, and spent some six weeks in thoroughly investigating its mines and prospects. With the result of Mr. Walton's mission we have every reason to be thoroughly satisfied. Unfortunately, however, at the close of his visit he was taken seriously ill, and was confined to his room at Denver for nearly a month—a very important one it was to us—because time was running on the bonds secured, and we on this side were without the details necessary to enable us to take prompt advantage of the excellent business Mr. Walton had arranged. But in addition to this serious hindrance, we were suddenly confronted with a still greater difficulty. I refer to the serious burst of hostile feeling which came from America like a bolt from the blue, spreading a thick cloud of distrust of all things American, and such opposition to every business proposition coming from the United States, that the feeling here may be described as amounting to deliberate boycott. With this intense feeling we had to contend, and I am thankful to say we have succeeded in floating the first fruits of our Cripple Creek venture in spite of it. This brings me to the second division—that part of our business completed since the formation of this syndicate. The Lucky Guss Gold Mine, of Cripple Creek, has been acquired and paid for. This mine is not a mere prospect, it is not a mere speculation, neither has it been sold to us upon its reputation. Its real intrinsic value has been proved since we took up the bond, and right glad would the original owners have been had they succeeded in upsetting the bargain, for its cash value to-day is probably half as much again as we have paid for it. In expressing our satisfaction at the interest we hold in this mine, I do not pretend that it will compare with such matchless properties as the Independence, the Portland, or some others. It is yet young compared with these, but considering the rapid increase in the value of the ore as depth has been reached and the large reserves certain to be found with deeper sinking; knowing as we do, precisely where other valuable lodes must penetrate our ground, I think we may claim that the Lucky Guss will soon take rank with some of the best mines in a neighbourhood which can show more rich claims than any other gold field within a similar area, and may yet be classed amongst the finest mines in the world. I think I may add that in a very shor

time we expect to furnish a practical demonstration of its value. The Mineral Creek Milling Company is another venture formed and registered by this syndicate. It is a non-speculative undertaking now being subscribed privately. Its object is to supply a mill to treat ore on tribute in a rich district near Silverton, in Colorado. It will possess a practical monopoly, and arrangements have been already concluded which assure a good return from the moment the mill is started. I now pass to the business in hand which is in various stages of progress. We have two important groups of mines in the Murchison District, both in a forward state, and both having a high local reputation. We have also an industrial undertaking of the first rank of importance, concerning which I hope to be soon in a position to furnish information, but it would be imprudent for me to say more about it on this occasion. In respect to this everything is going on nicely, but binding contracts have not yet been prepared, though we expect negotiations to be satisfactorily concluded very shortly. Upon the whole, therefore, I claim for your board that they have done all that could be done with the means at their disposal. Opportunities have, however, been offered to us which we were obliged to decline with great regret, and we have only to say again, as I said at the last meeting of the Mines Exploitation Syndicate, the amount of business we can prudently undertake must be measured by the degree in which we find support from our shareholders, to whom we have already given proof of the soundness of the business in which we are engaged. I would further remind you that the profits which would appear in our balance-sheet in the ordinary course do not represent the whole of the profits which by our constitution we place at the disposal of our shareholders, for each individual shareholder has the opportunity of participating in the promotion profits of our new ventures in advance of their submission for public subscription. As we grow in strength this additional source of profit should also grow in importance, and I rely upon it as the strongest inducement we can offer to you to co-operate with your directors and support them with additional capital from time to time as occasion may arise.

After some questions, asked by Mr. J. J. WOODS and Mr. F. HODGKINSON, had been replied to, the meeting terminated with a cordial vote of thanks to the Chairman.

SCOTTISH AUSTRALIAN MINING COMPANY, LIMITED.

The half-yearly general meeting of the shareholders in the Scottish Australian Mining Company (Limited) was held at Winchester House, E.C., yesterday, Mr. GEORGE SMITH (Chairman of the company) presiding.

The ACTING SECRETARY (Mr. J. A. Turner) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—Our business for the past six months has been done under circumstances similar to those which were prevailing in the Australian coal trade when we last had the pleasure of meeting you. The severe competition between the various collieries has not abated, prices have not changed materially, although there has been a slight further weakening, and the rate of wages paid by this and other leading collieries has not been altered. Some of the smaller collieries have, here and there, obtained concessions from their men, but none have been made to the larger establishments. In this matter the men are not well advised, I venture to think, for while resisting proposals for reduction by the large collieries and conceding them to smaller ones, they seem to forget that their action tends to keep competition active, to keep down the price of coal and to place the larger collieries, who (after all give employment to the greatest number of men) at a disadvantage. The larger collieries can get no more for their coal than the smaller ones, and the men are mistaken, I think, in refraining from acceding to proposals for reduction of hewing and other rates, and thus handicapping the collieries from which the greatest amount of employment is derived and where the working conditions are the best for them. We have lately been threatened with a general strike of miners, and had to decline shipping orders in consequence. The latest advices are as follows:—"April 17. The mine owners have accepted Mr. Reid's invitation to a conference," and, "the miners are considering whether the strike shall be extended;" and later, "that the strike was postponed." You will have seen in the *Times* yesterday the following telegram:—"The mine owners have promised not to reduce wages before 1898. The delegates of the miners to the conference have agreed to ask the men whether, in the meantime, they will accept the *status quo*. It is believed that they will concur." Last evening the following telegram was received from Mr. F. W. Turner, the secretary, as follows:—"Sydney, April 23. Conference yesterday, Premier presiding; masters unanimous; men debating decision; am hopeful; trade very active; prices unchanged; Barwood and Durham splendid properties." This is all the information the board have received up to this time. In February last, as you will have seen by the report, some of our workmen made demands for increased wages, which if agreed to would have rendered it impossible to work at any profit, in reply to which our manager made suggestions which were referred to a meeting of miners, who did not accept them, and consequently Lambton was closed on the 2nd of March last, leaving Burwood at work to continue our trade connections. I am glad to say that so far as volume of business is concerned this company has during the last six months maintained its position very well, having sold 26,828 tons more than in the previous six months, and 6290 tons more than during the corresponding six months of 1894. When, however, we look at the money result of all this work, I am sorry that it presents a far from satisfactory aspect. We have done slightly better than we did in the previous half year, but you will have seen from the accounts that the profit made is very small, and that all our work gives us no dividend. The point was raised at our last meeting as to whether it was judicious thus to go on giving away, practically, our coal, and keeping things going to provide employment solely for the benefit of the working men and getting nothing for our shareholders, and it is a very proper point to raise, and one that the board has deliberated upon very carefully. There is much to be said on both sides of the question. If we were alone in the trade the answer would be very easy, viz.:—"Stop until you can work at a profit," but when we are surrounded by competitors glad enough to take up our connections and fill our place, the question of stopping, even temporarily, assumes a very much more serious aspect in its probable influence upon the future of our position. On the whole, we have judged it best to go on doing enough business to keep our connections together, utilising the present low price to promote the foreign trade, but not endeavouring to push for mere bulk of sales. We have further taken a step which seemed to us judicious in present circumstances, and that is to send out our able secretary, Mr. F. W. Turner (who knows the mind of the board, and in whom they have every confidence), to Australia to consult on the spot with Mr. Croudace, their valued manager, and other workers deeply interested in our trade, and to see whether it is possible to devise some means to improve the position of matters there. We do not expect Mr. Turner, of course, to set everything right at the Newcastle Collieries. The causes of dispute unhappily lie too deep for that to be possible to him or any one else. Our able manager, Mr. Croudace, has used all possible effort to bring about some kind of harmony amongst the various collieries without success. And there is probably no man in the colony who has a better knowledge of the coal trade generally, and there is certainly no one there who has your interests more at heart. But we do think it possible that good may come out of personal conference of the board (through Mr. Turner) with our colonial officers and men, interested with ourselves in the preservation of our trade. We believe, too, that we could give to our competitors no stronger proof of our desire to see some reasonable arrangement for the common good entered into, and some cessation of the present unreasonable competition, than by taking this step of sending our representative to Australia to discuss matters on the spot, with a desire to bring about a degree of harmony (which may be for the good of all) without operating as an undue restriction upon trade or individual liberty of action. Gentlemen, your directors, as business men, have done their best with persevering calmness and resolution to face the very difficult situation that has overtaken them—(hear, hear)—and whatever may be the issue of this step which they have now taken you may rest assured that the interests of this company, in Mr. Turner's hands, will be strictly guarded. We are willing to join with others in any well-directed effort to improve matters, but whilst we do that we shall take care to maintain the position which this company has secured by judicious outlay of capital and long years of labour. For we still believe there is a good future before the Newcastle coal trade, both for mines and miners if only all workers—masters and men—will consent to pull together rather than by unwise conflict to pull asunder and destroy their common industry. Mr. Croudace still expresses satisfaction with the purchase of the Burwood property. We are getting splendid coal from that pit, and whenever times are a little more promising steps will be taken to increase its means of production. Durham, too, stands by, ready to come into active work whenever needed. In the company's three collieries—Lambton, Burwood, and Durham—I believe we have a very solid trade foundation, and I feel sure that the time will come when their value will be better represented in the price of the shares than is the case at present. We have refrained, in deference to the wish of the shareholders, from making the proposed call on the new shares—(hear, hear)—for the purpose set forth in the last report, and have provided what was needed by a temporary loan at a low rate of interest. Of course, it will be necessary to adjust the capital account by making the call and paying off the loan, and we shall take, I hope, a convenient opportunity to yourselves for doing this. I am very glad to think that for any money you may have to provide in this way you will have ample value in the company's colliery property. It should be borne in mind that our holding on through bad times means success when things return to their natural and fair trading conditions, and this the board is doing its utmost to bring about. The daily increasing need of coal, for steam purposes alone, by all nations, must in the near future overtake the present excess of supply, and render collieries once more profitable undertakings. I think there is no other point upon which I should touch, and will, therefore, conclude by moving:—"That the report and accounts of the directors now submitted be received and adopted."

Mr. F. P. WARD seconded the resolution.

Mr. FERGUSSON said at their last meeting he expressed a hope that they would have better luck next time, but it did not appear to have come yet. The prices still remained so much against them that he was very glad that the Lambton Colliery had been closed, and they were reserving their good coal for better times. The report and Chairman's speech clearly proved that the directors had done all in their power for the shareholders' advantage, but even if they were able to raise a great deal of good coal, with all their ability, energy, and experience, they were not able to raise the prices—that was, he considered, the only ugly feature in the report before them. However, there were some very encouraging and favourable points to be noted. In the first place, they heard that their coal was being taken into the inter-colonial and foreign markets in larger quantities, and this alone was a good sign. Secondly, though the profit had not been very large, still the balance shown in the general revenue account was in excess of that shown in the last report. One other satisfactory feature in the report was that Mr. F. W. Turner had been deputed to confer with Mr. Croudace, as some good should result from this when it was considered that both gentlemen had had a very long experience, and possessed an intimate knowledge of the company's business. In the meantime, however, the collieries were cutting their own throats. The remedy for this state of things was a combination, such as they had in former days, under the name of the Associated Northern Collieries.

Mr. J. R. FREWER remarked that the colliers had evidently not yet learnt the secret of meeting bad times. In prosperous times they had justly received a high rate of wages; and, therefore, in bad times they should share the loss with the colliery owners. When prices were low all concerned ought to equally feel the loss thus sustained. In regard to some of the original properties which the company acquired in 1858, he found that a portion of the land in the Newcastle district had been held a very long time without any profit being derived from it. He believed that if it was sold they would benefit themselves by the bargain. Surely in 38 years the value of the property in Australia had advanced. Referring to Mr. Turner's visit to Australia, he thought this was extremely well timed, and augured well for great things being done out there. Some 12 months ago he called attention to a small asset appearing in the balance-sheet—the gold consignments. Perhaps, he thought, this might now be turned into money. However, he really had no fault to find with the directors, who he considered had shown themselves to be thoroughly efficient, and had looked after their interests in every possible manner.

The CHAIRMAN, in replying to the enquiries, said with regard to Mr. Frewer's remarks, the directors' attention had been given to the subject of utilising the other properties, and also of utilising the gold they had got in nuggets. Mr. Frewer had forgotten, perhaps, that the gold might assist by-and-bye to get rid of the property. It was evidence of the gold-bearing country in which the property was situated, and the opinion was held by some that the district was even richer than Western Australia. He hoped it might be so, but it was most important that they should keep the nuggets; sooner or later they might come upon the gold-bearing reef itself. This would, of course, greatly increase the value of the property. In regard to the value of the original properties, the value of land in that part of the colony had decreased, but if gold was found anywhere near it would no doubt be the means of increasing it to a very large extent. However, the directors were giving this and other matters their attention, and what could be done for the best interests of the company would be done.

The resolution was then put and carried unanimously.

Mr. NICHOLSON proposed the re-election of Mr. George Smith as a director. He thought he was speaking in the name of the whole board when he said that no one had shown them more intelligence, assiduity, and patience during their misfortunes than their Chairman.

Mr. WARD seconded the resolution, and it was carried.

The CHAIRMAN briefly acknowledged the compliment, and moved the re-election of Mr. F. P. Ward as a director.

Mr. FERGUSSON seconded the motion, and it was agreed to.

The CHAIRMAN then proposed that Mr. Charles Gay Roberts be reappointed as one of the auditors.

Mr. VARLEY seconded the resolution, which was adopted.

The CHAIRMAN also moved that the fee of 20 guineas each be paid Mr. J. R. Frewer and Mr. C. G. Roberts for auditing the company's books for the half-year ended December 31 last.

Mr. FERGUSSON seconded the motion, and it was agreed to.

Mr. ROBERTS moved a vote of thanks to the Chairman, directors, and staff for their services during the past half-year.

Mr. FERGUSSON seconded the resolution, and it was carried unanimously.

The CHAIRMAN having responded, the meeting terminated.

EAGLE'S NEST (MOUNT MARGARET) GOLD MINING COMPANY (LIMITED).

The statutory meeting of the shareholders in the Eagle's Nest (Mount Margaret) Gold Mining Company (Limited) took place at Winchester House, E.C., on Monday, Mr. M. S. Cooke presiding.—The Chairman stated that the whole of the necessary working capital—£72,500—had been subscribed, and 12,500 shares were held in reserve. The directors had secured the attendance at that meeting of Mr. Wilton Hack, their representative in Australia, who would give them detailed particulars of their property. An important feature in connection with the company's operations was that water was obtainable at a very shallow depth on the property. He considered that the prospects of the mine were exceedingly good, and thought they might regard it as a perfectly sound mining venture.—Mr. Wilton Hack then addressed the meeting at some length, dealing generally with the prospects of the Coolgardie gold field in the first place, and afterwards minutely described the Eagle's Nest property. The lode on the company's property was well defined, and its condition gave every indication of the gold being evenly distributed, a fact which would considerably reduce the cost of extraction. He assayed by dollying samples from the two shafts already sunk, obtaining returns varying from 2½ to 5 ounces a ton, and he should be surprised if the 100 tons of quartz now ready for the battery did not yield at least 2 ounces a ton. The mine was being vigorously developed, and everything pointed to the conclusion that the property was one of great promise. As to the question of the permanence of the veins in Western Australia, he was convinced that it would be found that they would live to a good depth. Referring to the labour difficulty, he said the difficulty was to get skilled miners, but matters in this direction were, he was pleased to state, improving.—By the Articles of Association it was necessary for one of the directors to retire at this meeting.—Mr. C. H. Langmead accordingly retired, but was now re-elected, and a vote of thanks to the Chairman terminated the proceedings.

THE ROBINSON COMPANIES.

Cable news has been received by the Robinson South African Banking Company (Limited), the London agents, that the annual meetings of the Langlaagte Estate and Gold Mining Company (Limited), Block B Langlaagte Estate Gold Mining Company (Limited), and Randfontein Estates Gold Mining Company (Limited) were held in Johannesburg on Monday, April 20, and that they passed off satisfactorily. It was decided at the meeting of the Randfontein Estates Gold Mining Company (Limited) that 400,000 shares in the Porges Randfontein Gold Mining Company (Limited) should be distributed to the Randfontein Estates Company shareholders, being at the rate of one Porges Company share to five Randfontein Estates Company shares. The distribution will be made in June next. The reports and balance-sheets, and proceedings at the meetings, as well as full accounts of the companies' operations during the first 12 months ending December 31, 1895, as well as the diagrams and other documents connected with the properties in pamphlet form, are now on their way to this country, and will be distributed to the shareholders of the three companies immediately on arrival. The assays of the Robinson Randfontein Company have been cabled home and are as follows:—Robinson Randfontein Gold Mining Company (Limited). Clay reports No. 1 level almost completed throughout the mine. The reef is a splendid one, and the full length of the property. Assays from 14 dwts. to 60 ounces per ton for over a width of 6 inches. Winzes are now being sunk to the second level. Main shaft sunk 230 feet below this level. Now cutting station. Crosscut No. 1 level from main shaft will be finished in the course of a few days. Development during last month 1000 running feet. Ore continues very good. Prospects thoroughly satisfactory. Buildings being pushed on with all possible speed. Machinery ordered. Labour is plentiful in the mine.

THE CONSOLIDATED GOLD FIELDS OF SOUTH AFRICA (LIMITED).

An extraordinary general meeting of the shareholders in the Consolidated Gold Fields of South Africa (Limited) was held at the Cannon-street Hotel on Wednesday, Mr. H. E. M. Davies presiding.—The Chairman said they had heard the resolution read, which they were met there that day to confirm. The matter was so thoroughly gone into by the directors, solicitors, and auditors of the company at the last meeting, and since then the speeches had been circulated, so that the shareholders had had an opportunity of considering them. As the resolution last time was passed unanimously, he presumed there was nothing for him to do now but to formally move the confirmation of it. He then moved:—"That the capital of the company be increased to £1,975,000 by the creation and issue of 100,000 new shares of £1 each, to be called ordinary shares, and to rank *part passu* with the existing 625,000 ordinary shares in the capital of the company."—Mr. Farmer seconded the resolution, and it was carried with one dissentient.—The meeting then terminated.

ALBION (TRANSVAAL) GOLD MINES (LIMITED).

Mr. Alfred Jones presided on Tuesday afternoon at a special general meeting of the shareholders of this company, which was held at Winchester House, for the purpose of hearing a statement from Mr. A. W. Biggs (director) relating to his recent visit to the company's property.—Mr. Biggs, in the course of a long speech, stated that they had cut some very rich reefs, and there was every probability of other reefs being cut equally as rich. The completion of the railway to Barberton would considerably cheapen the cost of coal and other necessary materials, so that, taking all things into consideration, he was of opinion that the Albion Mine would become one of the dividend-paying mines of the Transvaal.—After a short discussion a vote of thanks was accorded to Mr. Biggs for his services and statement, and the proceedings terminated.

THE EXPLORING COMPANY (LIMITED).

A meeting of the members of the Exploring Company (Limited) was held at the Cannon-street Hotel on Tuesday, Mr. J. Oakley Maunde presiding, for the purpose of receiving an account showing the manner in which the winding-up of the company had been conducted, the property disposed of, &c.—The Chairman said before they could lay the accounts on the table the shareholders must resolve that the sum of £300 be paid to the liquidators.—Mr. Gilburd proposed a resolution to this effect.—Mr. Sutton seconded the resolution, and it was carried.—The secretary to the liquidators (Mr. G. G. Walker) having read the statement of accounts, the Chairman formally moved their adoption, mentioning that as much as £20,000 had been contributed to the Imperial Exchequer in consequence of the Government insisting on the company's property being valued on the day when it came into their possession.—Mr. Beit seconded the motion, and it was agreed to.—Other formal business having been transacted, Mr. Sutton moved a cordial vote of thanks to the directors for their past services. He considered that the company's affairs had been most ably managed.—The resolution was seconded, and carried unanimously.—The Chairman, in reply, said throughout the shareholders had always supported the directors, and they had thus been able to bring the company to a successful issue.—The meeting then terminated.

MEXICAN EXPLORATIONS (LIMITED).

The ordinary general meeting of the shareholders in the Mexican Explorations (Limited) was held at Winchester House, E.C., on Wednesday, when Mr. C. G. Boxall, who presided, in moving the adoption of the report, stated that the board had delayed calling the meeting for several months, with the approval of the advisory committee, in order that certain arrangements affecting the Palmarejo Mining Company (Limited) might be completed. When they last met they were, as guarantors of the debentures of the Palmarejo Company, under a liability to it of £100,000, but an agreement had since been arrived at for releasing them from the major part of the guarantee. They were now represented on the directorate of the Palmarejo Company by Mr. E. Applegarth, who had recently joined the board of this company. Their investments had been so largely written down in former years that it had not been found necessary to make any further reduction in them during the past 12 months. They retained unvaried their interest in the Mexico City Property Syndicate (Limited), which owned land almost within the boundaries of the City of Mexico. The syndicate was not doing much just now, but there were prospects of its lands ultimately proving of considerable value. The assets of the Tominil Mines (Limited), comprising a group of mines near Masatlan, and the machinery and effects there, had now become the absolute property of this company. Only that morning he had settled the last claim made against them in respect of it. The reports of experts as to these mines—which were valued at £400,000 when they were introduced on to the London market in 1889—were of a satisfactory character. It was considered that £30,000 would be sufficient with which to complete the necessary development work, and if any shareholders felt willing to join the board in providing that amount of capital for the purpose he should be glad

to hear from them. If, as the result of the expenditure of that money, the mines proved to be valuable, the question of disposing of them to a subsidiary company might be considered. The legal expenses had again been very heavy, but the board were satisfied that the money so spent had been usefully employed. In conclusion he said he did not doubt that the company would in course of time resume its position as a dividend-paying concern.—Mr. King seconded the motion, and, after a short discussion, it was adopted.

A COLORADO LETTER.

THE MAN WITH A NEW PROCESS.

By PERCY WILLIAMS, M.E.

TO-DAY, if one searches the Patent Office records of the United States in the department of metallurgy, he will find enumerated more processes for the extraction of gold or silver from their refractory ores than there are models of "new, improved, patent car couplers." In fact, if the statistician should be called to hand, he would doubtless report that there is a different metallurgical process available for the reduction of each ton of gold ore mined in the West. I say available, but I do not mean adaptable. The United States Patent Office authorities should impose, as a test, the requirements of which must be met before allowing patents for any process of ore treatment, that every such process shall be tested on an actual and commercial scale to establish proof of its ability to extract the values from an ore, and in such a manner at that, that it shall cost not over (at least) 5s. cash to "extract" 4s. worth of the "yellow stuff."

If such requirements had to be met, the over-worked clerks in the metallurgical department of the Patent Office would have an easy time of it indeed in merely recording the successful patents.

Will these well-meaning inventors ever realise the vast difference between laboratory metallurgy and the metallurgy of pounds, shillings, and pence? Will they ever realise that "extracting" gold from its ores is one thing, and preparing the ore for "extracting" another little thing which, alas, so seldom enters into the calculations of the would-be "revolutionisers?" The failure to recognise this important item of "how to do," accounts for the vast number of metallurgical monstrosities now in cold storage at the Patent Office. And still their number increases, because there is always some gullible capitalist to be found ready to listen to the enchanting tale of the inventor metallurgist about how he got 101½ per cent. extraction in his laboratory, and "so, of course, would naturally get much higher percentage in the mill" (if he would only say "mill tailings" I would believe him). And still our low-grade ore is thrown over the dump piles, hundreds of tons daily, and no salvation in sight for the owners of this grade of ore.

No large body of low-grade ore has ever been opened up without the non-plussed owner thereof being besieged by the 101 per cent. men who are sure their process is the only one adaptable, and hover around as numerous as the holes in a 100 mesh screen, until the owner proposes they put up a mill at their own expense; first on his mine, and, if it proves to be all they claim for it, he to pay them for the plant. Then, presto! disappear the inventors and the ore to the waste dump. But all mineowners do not make this kind of a sensible and fair proposition to the process men, some erect costly mills based on the laboratory plan, and after running spasmodically for a brief period amid the blare of newspaper trumpets, heralding the advent of this long-felt-want-of-a-process, they close down "owing to lack of water power or "mismanagement," or some kindred evil, when really the only trouble is that the proper vehicle to convey the gold from the crude ore to a nice "yellow brick" is lacking.

One cannot travel through any large mining district where exist rebellious ores in quantity, without being impressed with the significance of the many abandoned mill properties of some former defunct mining, milling, extraction, and excitement company. The truth in the nutshell is this. A new process of general application for extracting gold from its ores (I refer to rebellious ores particularly) in a profitable manner has yet to be found or discovered, and I make this statement with a full knowledge of the merits of the cyanide process in its present stage of development.

Some processes give good extraction with roasting, especially on ores from a region where fuel is unusually scarce and costly. Other methods of treatment may give good results with fine pulverising at an increase of cost that more than balances the higher rate of extraction, and so on until, perforce, the disgusted mine owner consigns the process metallurgist to any hot place in particular, and the ore to the waste dump. No one can blame him either, for it is undoubtedly far safer to neglect this class of ore altogether rather than to run the risk of the heavy financial loss involved in trying to pick out a process adaptable to just that kind of ore. The field is still open to the enterprising metallurgist inventor. Those who dare to tread the thorny path and meet with success will do well to bear constantly in mind these few facts, viz.:—

First. It is easy enough to extract the gold from most kinds of a refractory ore provided it is pulverised fine enough, but that there is no machine in existence which can reduce the ore to the required degree of fineness in a satisfactorily economical manner, wear and tear not considered. The coming process will only require coarse crushing.

Second. Roasting is expensive always, and requires extra space in the mill, extra handling, and more time consumed.

Third. Chemicals are easily handled, somewhat costly, and restricted, at present, to the few in which gold is solvent. But a new solvent for gold is possible. Find it if you can, but it must be cheaper and less liable to decomposition than cyanide.

Fourth. Do not be too sure of accomplishing everything in the mill that you can do in the laboratory. It is easier to empty a wash bottle on a precipitate than to sluice a thousand tons of tailings out of a 20 feet tank.

Fifth. The coming metallurgical process for treating gold ores in a profitable manner must come soon, and must be more general in its application than any now at our command, and when it does come it will bring untold wealth for its inventor and the mine owners who are awaiting its advent.

And, lastly. It must be kept in view that electricity is playing an important part nowadays in cheapening the cost of many old-time luxuries, and perhaps herein lies the power that will furnish us with the coming process. Who knows? Only let us find out soon. The world is crying aloud for gold. Why cannot the eminent Professor Roetgen show us poor metallurgists how to turn his rays on to our ore bodies in our mines, and enable us to see—first, if they contain any gold, and then locate each separate particle of the precious stuff in every piece of rock? Now I am dreaming, but who knows?

—The WEST AUSTRALIAN MINING COMPANY (LIMITED) post to-day (Saturday) the warrants for the dividend lately declared at 50 per cent. per annum.

Of the 40,000 Shares now offered for Subscription, the Director and their Friends have already agreed to subscribe for 23,000 shares.

THE

FARIA GOLD MINING COMPANY OF BRAZIL LIMITED.

Incorporated under the Companies' Act 1862-1886, whereby the liability of Shareholders is limited to the amount of their Shares.

CAPITAL £60,000

IN 60,000 SHARES OF £1 EACH.

Of which 20,000 Shares will be allotted to the Vendors in part payment of the purchase price.

ISSUE OF 40,000 SHARES, payable as follows:—

2/6 on Application; 7/6 on Allotment; and the remainder in Calls not exceeding 5/ per Share at intervals of not less than 3 months.

DIRECTORS.

EDMUND A. PONTIFEX, Esq., Chairman.
EMILE DE WAEL, Esq.
LOUIS MAICHAIN, Esq. (Paris)
JOHN TAYLOR, Esq.
} Directors of the Ouro Preto Gold Mines of Brazil (Limited).
JACQUES LEDAN, Esq., 86 Rue d'Amsterdam, Paris.

MANAGERS.
MESSRS. JOHN TAYLOR & SONS, 6 Queen Street Place, E.C.

BANKERS.
MESSRS. SMITH, PAYNE & SMITHS, 1 Lombard Street, E.C.

SOLICITORS.
MESSRS. LYNE & HOLMAN, 5 & 6 Great Winchester Street, E.C.

AUDITORS.
MESSRS. SPAIN BROTHERS & Co., 76 Coleman Street, E.C.

SECRETARY.
HENRY WARD, Esq.

OFFICES.
6 QUEEN STREET PLACE, LONDON, E.C.

PROSPECTUS.

THIS Company has been formed for the purpose of acquiring the Faria Gold Mine, situated in the Province of Minas Geraes, Brazil, about five miles distant from the celebrated St. John Del Rey Mine.

The property is freehold, consisting of about 1,000 acres, and is only three miles from the Station of Honorio Bicayo, of the Central Railway of Brazil.

The Mine has been worked to a depth of 50 metres by a French company, and 23,610 tons of ore have been milled, giving an average extraction of 8 grammes per ton, being one-half only of the gold contents of the ore.

Messrs. John Taylor & Sons have recently sent Mr. Samuel Gifford, one of their most trusted Agents, to examine the Mine, and the information thus obtained enables them to state as follows:—

The auriferous mineral is found in a vein or reef extending for a considerable distance, and the payable ore exists at this Mine in a column showing much continuity and regularity. It is very persistent and increases in size as it descends, the area at the various levels being as follows:—

At the 12-metre level,	20	metres	×	12	metres.
,, 26 ,,	,,	25	,,	× 12	,,
,, 37 ,,	,,	30	,,	× 12½	,,
,, 50 ,,	,,	34	,,	× 14	,,

These columns are a feature of the district, and many of them have been exploited with very profitable results. The St. John Del Rey Company is a notable example.

The method of treatment hitherto pursued is unsuitable to such pyritic ores, and the same may be said of any other system of amalgamation. From a trial made on the Faria ore at the neighbouring Mine of Passagem, belonging to the Ouro Preto Gold Mines, by the system so successfully employed there, an extraction of 70 per cent. was obtained, and the yield from Passagem Mine during the last financial year averaged nearly 75 per cent.

In addition to the defective extraction another chief reason of the Mine not having been profitable, was the fact of its not having been worked on a sufficiently large scale. Messrs. John Taylor & Sons are of opinion that the output can be readily increased to 2,000 tons per month, which will nearly treble the returns hitherto obtained.

It is estimated that each 50 metres vertical of the column of ore will produce 34,000 tons, or a monthly output of 2,000 tons for seventeen months, which will allow ample time for sinking the shaft and developing a new block whilst the ore in the previous one was being extracted. To crush the 2,000 tons per month the present mill will have to be replaced by a modern mill of 35 stamps of the latest pattern, with stonebreaker, frue vanners, &c.

The following results may therefore be anticipated so soon as the Mine is opened to the 100-Metre Level.

Monthly output, 2,000 tons of 16 grammes with an extraction of 70 per cent. = £1 16s. 6d. per ton, or	£3,050
Costs at £1 0s. 10d. per ton = ...	£2,084
Leaving a Monthly Profit of	£966

The working capital is set down at £24,000, which amount is estimated by Messrs. John Taylor & Sons to be amply sufficient to provide the new mill and other machinery required, and to defray the costs of deepening the Mine to 150 metres vertical, and to open up a block of some 63,000 tons of mineral, after which the development is provided for in the cost of £1 0s. 10d. per ton, estimated to cover all expenses in Brazil but depreciation.

The profit of £966 per month would amount to £11,592 per annum, or nearly 20 per cent., on the entire capital of the Company. An increase of a single gramme per ton in the extraction would be equal to a further profit of £3,000 per annum.

Messrs. John Taylor & Sons will be Managers of the Company.

The following Contracts have been entered into—viz.:—

1. 30th October 1895, between the Liquidator of the Société des Mines d'Or de Faria of the one part, and the Brazilian Mines Syndicate, Limited, of the other part, also three letters dated respectively 30th January, 26th February, and 1st April 1896, from the Liquidator of the Société des Mines d'Or de Faria to the Brazilian Mines Syndicate, Limited.

2. 17th April 1896, between the Brazilian Mines Syndicate, Limited, of the one part, and George Handel Wells, as Trustee for the Faria Gold Mining Company of Brazil, Limited, of the other part.

3. 17th April 1896, between George Handel Wells, as Trustee for the Faria Gold Mining Company of Brazil, Limited, of the one part, and Messrs. John Taylor & Sons, of the other part.

The vendors have entered into various contracts and arrangements with third parties (but to none of which is the Company a party) in connexion with the formation and promotion of the company, and guaranteeing subscriptions to a portion of the capital. Subscribers will be deemed to have notice of such contracts and to have waived their right to any particulars thereof, whether under Section 38 of the Companies Act, 1867, or otherwise, and subscriptions will only be received and allotments made on that footing.

The purchase price for the property has been fixed by the Vendors (the Brazilian Mines Syndicate, Limited) at £36,000, payable as to £20,000 in fully-paid shares, £12,000 in cash, and £4,000 in cash or fully-paid shares, or partly in cash and partly in fully-paid shares, at the option of the Directors of the Purchasing Company.

The price includes:—

1. The Freehold of about 1,000 acres stated to have cost originally			£24,000.
2. Machinery, Buildings, Plant, &c., valued at 317,574 milreis, according to the Inventories of the French Company, after due deduction for depreciation, &c. This is equal at the present very low exchange of 9d. per milreis to	£12,240	0	0
3. A watercourse, more than three miles long (providing ample power for all machinery and other purposes), made by former owners at a cost, it is stated, of	16,000	0	0
Together, excluding the Freehold ..	£28,240	0	0

The Brazilian Mines Syndicate, Limited, will defray all expenses up to and including allotment.

Messrs. E. A. Pontifex and L. Maichain, who are Directors of the Brazilian Mines Syndicate, Limited, will join the Board after allotment.

The Agreements specified above, Messrs. John Taylor & Sons' Report upon the property, and a print of the Memorandum and Articles of Association, can be seen at the offices of the Solicitors of the Company.

Applications for Shares may be sent to the Company's Bankers or to the Company, with a deposit of 2s. 6d. per share.

If no allotment be made the application money will be returned in full; if the number of Shares allotted be less than that applied for, the surplus so far as necessary will be credited in reduction of the payment on allotment, and any balance will be refunded.

The Directors will not proceed to allotment unless the full amount of £24,000 is secured for working capital.

Prospectuses may be obtained from the Bankers, or at the Offices of the Company.

25th April 1896.

THE KOMATA QUEEN (LIMITED).

THIS is the title of a newly-formed New Zealand Company, of which the capital is £75,000, in shares of 2s. 6d. each. The company has been formed to acquire and develop a very extensive property in the southern portion of the Coromandel Peninsula, in the mining district of Hauraki, New Zealand. The area of the property it is proposed to acquire is 129 acres 1 rood, held, as to 100 acres, as a special claim, and the remaining 29 acres 1 rood as a licensed holding under Government for terms of 21 years from September 14 and May 21, 1895, respectively, and renewable. The situation is a very desirable one, being situated amongst the valuable Waitekauri group of mines, and in close proximity to the celebrated Waihi, Waitekauri, and Komata Reefs Mines, and within easy distance of the township of Waitekauri. There are said to be several reefs traversing the property, and although but little has been done in the way of systematic development, yet from the nature of the ore and the character of the enclosing rock, there is every possibility that they will, when developed, prove as productive as the Te Ao Morama claim, now the property of the Waitekauri Gold Mining Company.

The property has been examined and reported upon by Captain W. H. Argall, manager of the Kapanga Mines, Captain F. Hodge, manager of the Hauraki Mines, and others, from whose reports the above particulars have been extracted.

Captain W. H. Argall writes:—

"The reefs traversing the property are large and enclosed in andesite rock, which varies in hardness. When of a soft or decomposed nature it is called by geologists 'propylite,' otherwise by miners 'kindly country'; at other times it is hard, which is due to the presence of hornblende. Both classes, however, in this locality are productive of gold-bearing reefs. In this property there appears to be two systems of lodes, the champion ones bearing about north-east and south-west, and the others running more to the eastward; therefore, they should intersect the main reefs at various angles. At the intersection rich ore will very likely be met with. What is supposed to be the outcrop of the Komata reef can be seen in this ground; this, of course, is taken as such from the bearing of that reef where worked in the Komata Reefs Gold Mining Company's ground. It is about 12 feet in width, but no footwall has yet been seen. Near at hand large boulders of quartz can be seen, which evidently have been shed from this reef. Running about parallel with the last-mentioned lode in the Komata Reefs property is another, called the Black Reef, which alters its course, and probably junctions and forms one big reef going south; therefore, this will account for the thickness of same where opened on in this ground. Lately, in the Komata Reefs Company's ground two other lodes have been intersected, which, from their bearing, must also traverse this property. According to the trend of the Alpha Reef, evidently it must as well pass through your ground. The bearing is about north 60 east, and if this course continues it must intersect or junction with the Main Komata Reef.

"Very little work has been done on the reefs, simply being opened on a little on the outcrops, but from the nature of the ore which they contain, and the character of the enclosing rock, there is every likelihood they will, when developed, prove as productive in this ground as in the Te Ao Morama, which is now the property of the Waitekauri Gold Mining Company, and also in the Komata Reefs Company's special claim, where at the moment the prospects are most favourable, and in all probability a very valuable mine will be developed, as the reefs are large and well defined, containing ore of high grade. The contour of the ground is such that this mine can be worked to a great advantage by means of adit levels, giving a great height of backs; therefore, no sinking will be required for a number of years."

Captain F. Hodge writes:—"In the vicinity surrounding the reefs traversing your property auriferous quartz exists of more or less value, scattered largely, and which no doubt the development of these reefs will discover rich bodies of auriferous ores equal to the surrounding mines. A new reef with marked outcrop near the north boundary has been cut into 6 feet wide, running nearly north and south, with a dip west; this reef is almost parallel to the Black and Komata reef. The character of the quartz crystals, which are showing in the reef in fair quantities, guarantees the reef a true one

"A reef some distance west has also been cut into 6 feet wide, and no walls met; the character of the same is identical with the new reef. I take its approximate bearing to be somewhat parallel, but with no walls seen it is difficult to define its true run.

"A reef is also discovered in the approximate line of the Alpha reef, and, so far as seen, with no walls; this is over 5 feet wide.

"I would recommend your getting a good survey working plan, adopt the general basis of altitude between levels on the different reefs, develop them at once simultaneously with (say) at least 50 miners to start—carrying on up-to-date mining, keep regular results of value of your ores as passed through, and strictly mark their values on a large scaled plan prepared for that purpose. By this means you would in six months be in possession of an extensive mine opening out, and in all probability able to supply 20 heads of stamps with good payable ores, and as developments proceed through and through (without which you cannot scarcely expect) no doubt you will come across rich runs of high grade ores similar to the adjacent mines in your group, which have been discovered, ranging in value from £3 to £17—£25, and £30 and £40 per ton. In conclusion, I would say that the displacement of the primitive battery wet process treatment to save the fine gold by the cyanide process and stamping dry; with the already large amount of capital subscribed in the district (the rich ores being raised on all sides), and the anticipated value of mining properties increasing steadily in mining ventures. It is not a speculation, but a good investment. I would advise a working capital of £20,000.

"Since writing my report, I hear from good authority that, notwithstanding the very short space of time, the Komata Reefs Gold Mining Company (Limited) have been developing their ground, a new and payable reef has been discovered. This should positively run through your ground, and I recommend you to have the approximate line of said reef shown on your plan."

The prospectus states that there is a valuable water right on the property. The directors of the company are: H. Wilson, Esq., Chairman of the Hauraki and Komata Reefs Gold Mining Companies; J. A. Travers, Esq., director of the Komata Reefs Gold Mining Company; Charles Clark, Esq., director of the Tararu Creek Gold Mining Company; Thomas H. Wilson, Esq., 9, St. Mark's-square, Regent's Park., N.W. Mr. A. J. Lavington is the secretary, and the offices are at Dashwood House, New Broad-street, E.C.

MR. WILLIAM HEINEMANN has favoured us with a copy of the *New Review* for May. Among the many interesting articles which fill its pages we commend to the especial attention of our readers:—"Mr. Chamberlain's Inheritance," by E. B. Iwan-Muller, and "Mr. Rhodes and the Cape Parliament," by A Ten Years' Resident in the Cape Colony.

NEW ISSUES.

THE TOWRANNA GOLD MINES OF WESTERN AUSTRALIA.

This is another West Australian Company, formed with a capital of £125,000, in £1 shares, for the purpose of acquiring and working two gold mining leases, Nos. 269 and 270, of 25 acres each, known respectively as the Castle and Edith leases, situated at Towranna, in the north-west gold fields of Western Australia. The prospectus states that "These leases were first taken up in July, 1895, when there was a rush to the district, by a prospecting party under the leadership of Dr. Clements, a gentleman of great experience in mining matters, since which time they have been vigorously developed under his superintendence, with the result that their great value has been fully demonstrated; the present, therefore, is considered an appropriate time, thoroughly justified by the developments effected, to equip the mines with all necessary machinery, &c., in order to commence crushings at the rliest possible moment. Towranna is situated some 20 miles from the port of Balla Balla, with which it is connected by good level roads, and the building of a railway is projected which will pass within a very few miles of the mines. A plentiful supply of water has been struck on the adjoining leases, so that all questions of transport and economic conditions of working the properties have been solved. Five shafts have been sunk upon the leases at varying depths, up to 70 feet, and these have proved the existence of three distinct reefs improving in width as they go down, the greatest width being met with in the deepest shaft." The property was reported upon in November last by Mr. A. H. Salmond, Government mining surveyor and engineer of Roeburne, W.A., who says:—"It may be looked upon as proved beyond a doubt that a large body of valuable gold-bearing quartz awaits raising. The quartz veins that have been exposed and followed down at various points show varying widths. Samples tried by dolly process show results up to quite 6 ounces per ton, and the general average battery stone I should expect to yield 1 ounce 15 dwts. per ton."

THE FARIA GOLD MINING COMPANY OF BRAZIL (LIMITED).

This company has been formed with a capital of £60,000, in £1 shares, of which 40,000 are now to be issued, for the purpose of acquiring the Faria Gold Mine, situated in the province of Minas Geraes, Brazil, about 5 miles distant from the celebrated St. John Del Rey Mine. The property, says the prospectus, is freehold, consisting of about 1000 acres, and is only 3 miles from the station of Honorio Bicayo, of the Central Railway of Brazil. The mine has been worked to a depth of 50 metres by a French company, and 23,610 tons of ore have been milled, giving an average extraction of 8 grammes per ton, being one-half only of the gold contents of the ore." Messrs. John Taylor and Sons have recently sent Mr. Samuel Gifford to examine the mine, who reported as follows:—"The auriferous mineral is found in a vein or reef extending for a considerable distance, and the payable ore exists at this mine in a column showing much continuity and regularity." Mr. Gifford says that "it is estimated that each 50 metres vertical of the column of ore will produce 34,000 tons, or a monthly output of 2000 tons for 17 months, which would allow ample time for sinking the shaft and developing a new block whilst the ore in the previous one was being extracted." The working capital is set down at £24,000, which amount is estimated by Messrs. John Taylor and Sons to be amply sufficient to provide the new mill and other machinery required, and to defray the costs of deepening the mine to 150 metres vertical, and to open up a block of some 62,000 tons of mineral.

THE COOLGARDIE AUSTRAL GOLD MINING PROPRIETARY (LIMITED).

The capital of this new West Australian company is £90,000, in shares of £1 each, and it has been formed to acquire and work three well developed gold mining claims, comprising about 30 acres in one block, situated about 1½ mile from the Coolgardie Railway Station, and known locally as the Austral Syndicate Gold Mining Leases granted by the West Australian Government, and numbered 1509, 1744, and 1786. The property has been examined and reported upon by Messrs. James, Kerr, De Courcy Brown, B.A., BSc., Thomas Matthews, Robert S. Gorrie, and Richard Holmes, M.E. Mr. Zebina Lane, manager of the Great Boulder Mines, has also reported upon the mine for the satisfaction of the directors, and in his report says:—"Several shafts have been sunk on the leases, the main one being down, at the time of my last inspection, to a depth of 100 feet, the last 40 feet being on the underlay and following the course of the lode. The average width of the lode at this point was about 8 feet, laminated quartz with iron gossan intermixed, from wall to wall. Gold could be seen as the stone was broken, and fair average samples taken from the heap in bulk gave an assay of 1½ ounce to the ton, the gold being fine and evenly distributed throughout the matrix. Two other shafts, 60 feet and 80 feet deep, prove the course and continuity of the lode. The cost of a 10 stamp mill, with power to drive 20 stamps, and a suitable hauling plant, would be about £4500 erected and in working order. The cost of mining and milling the ore will not be more than £3 per ton, and from present indications and appearances there should be no difficulty in running 10 stamps continuously at a good profit."

KURANUI-CALEDONIAN GOLD MINING COMPANY (LIMITED).

This company has been formed with a capital of £175,000 to acquire mining properties situate at the Hauraki Gold Fields in the Thames district of New Zealand, known as Hazelbank including the celebrated Old Caledonian Mine and the adjoining property known as Kuranui No. 2 Licensed Holding, the total area being over 20 acres. The property is situate on the sea coast 45 miles south-west of Auckland City, from whence there is a daily service of steamers. An important fact, the prospectus states, in connection with the economical working of the mines, is that this company is entitled, free of charge, access to the Moanatairi Main Tunnel, which traverses Kuranui No. 2 ground from end to end. Messrs. Coutts, Clark, and Adams report on the property. The purchase consideration is £125,000, payable as to £15,000 in cash, £70,000 in fully-paid shares, and the balance in cash or fully-paid shares at the option of the directors.

BRITISH COAL IN GREECE.—Our Consul at Patras, Greece, in a report on the trade of the Morea, states that almost all the coal imported is of British origin. The total quantity imported in 1895 was 15,400 tons, of which 11,900 tons by British steamers, 1700 tons by Greek, and 1800 tons by Danish steamers. Scarcely any coal is used for household purposes, charcoal being almost exclusively used, but brushwood, woods and forests, are rapidly disappearing before the charcoal-burner's axe, and not many years will pass before coal will form part of the domestic economy of Greek households.

CORRESPONDENCE.

We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.

PARDY'S SYNDICATE.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—In your issue of March 28 you published a letter from a discharged servant of mine, making certain statements with regard to the properties held by Pardy's Mozambique Syndicate in the Massi Kessi district of Manica land.

As a certain amount of uneasiness has been expressed by my shareholders, I think it as well to contradict these statements categorically. Mr. Leslie, from whom these statements emanated, was engaged by myself some few days prior to my departure for England to practically test and work our alluvial claims. Some three weeks after his engagement he was discharged by my acting manager for misconduct, and his letter to you was dated about a week after his dismissal.

With regard to the alluvial claims, every bit of ground adjacent to my properties has been taken up by other companies. It is hardly possible to take a pan of dirt from anywhere in the vicinity without finding a colour.

These claims have never been offered to the British public, because I have always considered it inadvisable to market claims until they are thoroughly proved. In various quarters I have been approached with the view to purchasing my syndicate's alluvial properties, but have invariably refused them on the above grounds.

Let me now take and endeavour to refute Mr. Leslie's statements:—

No. 1. Pardy's Range.—Mr. Leslie says:—

"This is the western extension of the Guy Fawkes. There is no outcrop or prospecting done on this block, and the western portion of the Guy Fawkes having no reef, they have not looked for anything on Pardy's range."

I will here state clearly and concisely what has been done. On the centre of the claim No. 36 on Block A. which is in Pardy's range, there was when I left, December 28, 1895, a cutting 10 feet long, 4 feet deep, and 3 feet wide. This was made on an outcrop of the quartz which carried a fair prospect of gold; the lode was exposed to the surface, showing 15 inches of quartz and 9 inches of quartzose, in all 2 feet of quartz and quartz matter combined. On proving this to be a solid reef we left it, and put in a low level drive from the foot of the hill, which should cut the reef at a depth of 200 feet. The length of the adit would be 290 feet, and would be through its greater part through conglomerate.

Mr. H. Smith, contractor of Umtali, was given the contract for driving this adit, and at the time I left was in through the face of the hill 95 feet. He is now at the present moment conducting three further adits, each of 500 feet, and an open cutting across the crown of the hill on the extreme west of Pardy's range.

No. 2. Guy Fawkes Reef.—Mr. Leslie states:—"There is a drive on the reef about 500 feet. At the mouth of the drive the reef split into small stringers, and at 250 feet pinched out. The other part of the drive is a blank. To the west a crosscut was put in from the face of the hill, but nothing was found, and it was stopped. At present they are working about 150 feet from the mouth of the drive on a patch of quartz."

Here Mr. Leslie has not only maligned myself and the company, but has also gratuitously libelled the following gentlemen who have given reports upon my properties, viz.:—

Messrs. George Danford, A.M.I.C.E., and Surveyor General to the Mozambique Company.
Mr. Harry Stannard, A.M.I.C.E.
Mr. Ralph Smith, of Piperston, Drogheda.
Mr. Aubrey Danvers, Prospector.
Messrs. Laing Brothers, Mining Engineers and Assayers at Umtali.
Mr. Blatch, the present Acting Manager.

The Guy Fawkes reef is a true fissure vein with well-defined hanging and foot walls, almost vertical, simply having a dip of 80° north and striking a point north of west. It averages 2 feet in width all through, and, as far as our exploitations can tell, the deeper it goes the wider it gets. We are at the present moment getting ¼ ounce over the plates, but the Huntingdon mill is inadequate to cope with the quartz contained in the Guy Fawkes Reef, and two 50 stamp batteries are now on order from Sandycroft to be sent out at once and worked by the water power which obtains so fully in the Massi Kessi district.

On the Guy Fawkes reef there are at present five drives. No. 1, the original drive, was, when I left, in some 500 feet; No. 4 on the twin reef 7 feet 3 inches north of the main reef was in 153 feet; No. 2 drive from the south to the north, which was driven to connect the main drive No. 1, was obliged to be abandoned through the falling in of some old workings. No. 3 drive, which had also been put in from the face of the hill south to connect with the main reef, was in 352 feet.

All these drives are on the same level, and when connected the reef will be easily worked. No. 5 drive is put in immediately under No. 1, and some 30 feet below it, and has got on to the reef at a width of 2 feet 6 inches carrying gold showing in the pan 2½ ounces to the ton.

No. 3. Ingamasonga Reef.—Mr. Leslie states:—"This block is to the east of Guy Fawkes. A drive in the gully opposite the Guy Fawkes drive shows some loose blocks of quartz with no walls. The drive is in about 10 feet, and nothing solid. A few feet from this drive there is no outcrop to be found or any prospecting done."

The Ingamasonga reef is an extension of the Guy Fawkes reef. The reef here has been bisected by the Guy Fawkes creek. It is possible to stand in the mouth of the Guy Fawkes drive and throw a stone into the mouth of the Ingamasonga. The reef here is particularly well-defined, having the same hanging and foot walls which encase the Guy Fawkes reef across the creek. It carries all the characteristics of the opposite section of reef, but being struck some 25 feet lower is wider. Its width when I left was 6 feet. Here we have again the twin reef.

On the original reef 150 feet have been driven, and on the northern side, or twin sister, some further feet north, we were in at the time I left some 15 feet, and the reef was looking particularly solid and good.

A trial crushing of this reef has given 72 ounces to 100 tons over the plates.

I think that we shall better this, as all our assays on this side, from men like Messrs. Johnson, Matthey, and Co., and Messrs. Claudet, show that we have reef averaging between 7 and 8 ounces to the ton. We are now doing our best to find out how the loss occurs. I may state, in support of the above, that I have backed my own opinion to rather a large extent. For instance, my holding in Guy Fawkes reef when I left England on June 15, 1895, was 5902 shares; my holding at the present moment is 11,952 shares.

At the end of October I was so thoroughly satisfied with the future of the Guy Fawkes reef that I cabled to my brokers, Messrs. Davis and Kilpin, of the Stock Exchange, London, to sell out for me stock to the amount of £6000, and invest it in Guy Fawkes reef shares.

I cabled to our London office also to buy me 1000 shares in the same property. Messrs. Davis and Kilpin and Mr. G. C. Howard have carried out my instructions in this matter, and purchased for me some 6500 shares, which averaged me 25s. per share.

Since I left England on June 15, 1895, in all my holdings, including Pardy's Mozambique Syndicate, Guy Fawkes Reef, Massi Kessi Reef, Ingamasonga Reef, and Pardy's Range, I have not sold a single share, and beyond that am increasing my holding. A shilling paid at Somerset House will verify these statements.

I had, when I left Massi Kessi, 26 Europeans and 159 natives working in the various mines. Mr. Blatch has been instructed to increase that number and engage, if possible, 1000 natives from the Inhambane district of South East Africa.—Yours faithfully,

JAMES R. PARDY.

Pardy's Mozambique Syndicate (Limited),
Broad-street Avenue, London, E.C., April 23.

COMPLETE AND CHEAP GOLD EXTRACTION.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—My attention has been called to an article in your issue of the 18th inst., entitled "Complete and Cheap Gold Extraction," M. de Rigaud's process.

There appear to be so many contradictions in it that I deem it my duty to ask you to allow me to place before your readers a short statement with regard to it.

M. de Rigaud states that his new process consists in treating auriferous ores with a chloride of sulphur SCl_2, or tetra-chloride of sulphur SCl_4. Unfortunately for himself, he immediately after states that there is, strictly speaking, only one true compound of sulphur and chlorine—S_2Cl_2. He, therefore, admits that the tetra-chloride and the chloride have no existence.

Still more unfortunate for him is it that the compound which does exist—S_2Cl_2—has long ago been patented, and for several months past I have been making, with other mining experts, numerous tests with all kinds of refractory auriferous ores. There have been a long series of experiments, some of them on the ton scale which have proved to satisfaction to be capable of extracting not only the whole of the gold, but the whole of every other metal contained in the ores, and this is done at a cost considerably below M. de Rigaud's statement of 9 francs per ton, as in the case of his treatment—in fact, the case of the process I refer to is not above one-ninth of his—viz., 1 franc.

It is proposed by M. de Rigaud to treat the ore by his process in a long drum of leaded cast iron. This, to anyone knowing anything of metallurgical chemistry, reads very much like nonsense, for, as we know, in the presence of chlorine the lead would be rapidly attacked, and would precipitate every other metal above it in the galvanic scale, into the residue.

M. de Rigaud claims that he has two methods of using the process—a rapid and a slow one. The rapid one, so called, takes 4 or 5 hours, while the slow process, which he claims is the true one for treatment on a practical scale, he only tells us, is incomparably more rapid than any other known process. This statement is a very vague one. While the results of all the experiments made by me tend to prove that in the patented process for the use of di-chloride of sulphur the time needed does not in any case exceed 30 minutes when treating a 5-ton charge. In comparison to M. de Rigaud's complicated apparatus, in this process, only one simple wooden vat suffices for the treatment of 5 tons of ore at a time for 200 tons a day, and the remaining plant consists of inexpensive wooden tanks, in which each metal is precipitated separately and chemically pure.

I do not find, as stated by M. de Rigaud, that the ore requires to be in a state of liquid mud, and prefer it as it comes from the rolls,

The sulphate of iron which M. de Rigaud uses for precipitation has been used for many years, and is nothing new, but it has the terrible inconvenience of taking 48 hours to precipitate the gold.

It is stated that there are a large number of metals which are entirely excepted from treatment by M. de Rigaud's process; among these are antimony, tin, and zinc, which are not, as stated, rarely but commonly found in refractory ores.

The most extraordinary contradiction in M. de Rigaud's statements is that sulphate of iron is used to precipitate the simple chloride of gold, yet shortly afterwards he says that when soluble chlorides, precipitated by sulphate of iron, are produced, this process is inapplicable.

Where contradictions such as these exist in a paper written professedly to describe a new process, the public have a right to ask that, if possible, these should be reconciled before the whole statement can be considered trustworthy.

Knowing the difficulties which surround the question, I consider that it is folly to go to any imitator, and not to the original inventor, who alone is able to solve them, as they arise.

Yours truly,

HENRY TAPP,
Mining Engineer.

The Laboratory, Mansion House Chambers,
20, Bucklersbury,
London, E.C., April 23.

TO THE EDITOR OF "THE MINING JOURNAL."

DEAR SIR,—I have read in the current number of *The Mining Journal* your reproduction of M. Camille-Grollet's paper on the De Rigaud process, read before the Société des Ingénieurs Civils de France, and in view of the interest which attaches to new processes for gold recovery, I venture to submit a few remarks on this latest development.

The novelty of the De Rigaud process does not concern me, so I need not discuss this point. At first sight there appears to be some difficulty in handling the tetra chloride of sulphur in quantity, owing to its suffocating smell, probable difficulty of transport, and its rapid decomposition in contact with water. But supposing that these difficulties can be overcome in practice, how much further are we with this process than we are with ordinary chlorination as now practised? According to M. de Rigaud, this process is cheaper and more rapid. But we have surely still the expense of roasting sweet when dealing with pyritic ores or tailings containing a small amount of sulphides.

If this is correct, can the De Rigaud compete with the cyanide process?

It would be interesting to know what classes of ore have been successfully treated by this method; also to what mesh must the ore be crushed to obtain the 100 per cent. extraction? The tailings mentioned lower down run about as rich as the Randt tailings, but I do not know if it is these tailings that the process is intended to treat. If so, would it be more economical to treat (say) some hundreds of tons a week in tanks of 1 ton capacity than to treat by the cyanide process?

Finally, if roasting is necessary, and it is intended to treat complex ores by this method, it can only be looked upon as an improvement in barrel chlorination for such ores; but it cannot be

considered to be an advance on processes which are able to deal with the unroasted ore.

Of course, for clean tailings it should do well if the cost compares favourably with cyanide, but what is now more needed is a process to treat hitherto untreatable ores.—Yours faithfully,

HUGH K. PICARD.

London, April 21.

THE GREAT BOULDER PROPRIETARY GOLD MINES, LIMITED.

TO THE EDITOR OF "THE MINING JOURNAL."

DEAR SIR,—We have to request that you will state that Mr. Zebina Lane, who has so successfully managed and opened up the mine for this company, continues his engagement as consulting engineer, never having severed his connection in any way. We find this announcement necessary, as persistent statements have been made to the contrary.—Yours truly,

London, April 23. B. DEPLEDGE, Secretary.

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

ACHILLES GOLD FIELDS.—The following telegram has been received by the directors of Achilles Gold Fields (Limited) from the managing director at the mine, in reply to their inquiry, why no return of the March crushing had been sent:—"Do not intend to clean up till April 30. Battery repairs will take about 14 days. Prospects excellent."

ARMADALE.—Copy cablegram from Mr. F. C. B. Vosper, A.I.M.E.:—"I have examined Armadale very carefully, and find I can confirm Dr. Chewing's and Mr. Nicolas's statements. Developments upon the lode incontestably prove a very large ore body of great value. Full report is sent by mail."

BENDIGO DISTRICT.—A cablegram has been received from the local committee, dated 23rd inst., advising that the work at the mines is being pushed ahead.

BROKEN HILL PROPRIETARY.—The available yield for the week ending the 23rd inst. was 8628 tons of ore, yielding 493 tons of lead, containing 145,393 ounces silver. The price of the shares in Melbourne is £2 9s. 6d. buyers.

BIG BLOW.—Cablegram received from Mr. W. M. Vivian, mines manager, April 24:—"Have increased mill to 10 stamps, working seven hours per day."

CONSOLIDATED MURCHISON.—Crushings for April:—1035 tons, realised 569 ounces.

CRAVEN'S CALEDONIA.—The following cablegram has been received, giving result of crushing, dated Charters Towers, April 20:—"93 tons, yielding 151 ounces gold."

DAY DAWN BLOCK AND WYNDHAM.—This company has received the following cablegram from the general manager at Charters Towers, giving the result of the crushing for the fortnight ending the 18th inst.:—"Tons crushed, 1030; yield of gold, 1062 ounces; approximate value, £3665; fortnight's expenses, £1940."

GOLDEN HORSE SHOE.—The directors of the Golden Horse Shoe Gold Mining Company (Limited) have pleasure in stating that in reply to their cables to their manager at the mine regarding the rumour that the Ivanhoe reef had been struck, they have received the following information:—"The manager believes the Ivanhoe reef has been struck, and assays from the lode, which is 6 feet wide, average 1 ounce 7¼ dwts. per ton, and crushing on this lode will commence April 23. Their manager also adds that the lode looks exceedingly promising."

GOLD FIELDS OF TIERRA DEL FUEGO.—The following telegram has been received from Mr. Hyacinthe Rouquette, the company's manager in Mozambique:—"Alluvial deposit rich in gold work is being pushed ahead. Have secured 15 (additional) claims."

GOLCONDA.—Mr. Benson, the mine manager, cables as follows:—"North winze No. 2. Struck 2 feet quartz reef in contact with iron reef formation showing gold."

HALL MINES.—The results of the smelting operations for the month of March are as follows:—2102 tons of ore were smelted, yielding 212 tons matte, containing approximately 108 tons copper and 76,113 ounces silver.

HAMPTON GOLD FIELDS.—The directors have received the following cablegram, dated April 16, from the manager, Captain J. M. Craze:—"Have pegged two 50 acres, Block 48. There are four veins on the property, three showing visible free gold. My report will be sent by to-day's mail."—Official note. The company has purchased Blocks 35, 37, and 39 from Hampton Plains Estate (Limited), which were referred to in a circular recently issued by the latter company. It is intended to form a subsidiary company to take over these, and the shareholders will have an opportunity of subscribing for capital.

HANNAN'S BROWNHILL.—The directors have received information by cable that the machinery is working satisfactorily. A further cable from the manager states:—"Mill running well, 16 hours daily, extraction satisfactory."

HANNAN'S GOLDEN TREASURE.—Cablegram received from Mr. Charles Kaufman, consulting engineer:—"New developments of a highly favourable character have been made at the bottom of shaft on lease 1219. The shaft is 90 feet deep."

HERBERT.—A cable received from the managing director, Coolgardie, states:—"Struck leader on the hanging wall side of the vein. Assay value of gold, 8 ounces per ton."

HAMMOND'S FIND GOLD REEFS.—Copy of cable received April 23:—"From Colonel Burton Brown, Kalgoorlie. I think the property has every element of success. The situation of the property is all that can be desired; the workings show an inclination to develop into a substantial pay chute; you must keep on crosscutting to prove the ground. The lode carries gold in paying quantities. An adit driven 116 feet has cut the the lode; the reef shows visible gold going down into the bottom; will continue sinking; much pleased with the appearance of property; have already ordered such measures as may be necessary. Full report sent by mail."

ISLE OF MAN.—The secretary has sold 100 tons of this company's ore at £8 10s. 6d. per ton.

KABOONGA.—The following cablegram has been received:—Main drive is now in 484 feet; the ground is now hard, but will probably become softer. The rise is now up 14 feet.

KAPANGA.—The directors have received the following telegram from the manager—viz.:—"Have resumed sinking, and shaft has been sunk 6 feet. Have intersected a small but well-defined vein in the shaft."

LOMBARDY.—The following telegram has been received, dated Cue, April 18:—"Have met with water in main shaft at 110 feet. Appearances are in favour of our striking ore body within the next few feet. Fully satisfied with everything up to the present."

MENZIES GOLD REEFS PROPRIETARY.—Cable information has been received to the following effect:—"Have crushed 60 tons; 150 ounces retorted gold.—Stone from Friday Claim, water shaft, underlay shaft. Stopped crushing April 18; water in dam finished. I have let a contract to extend dam; expect water from lake four weeks."

MALACATE.—We are officially informed that this company "have struck rich ore in five new places—San Pablo, San Pedro, Magdalena, Estrella, San Diego."

MENZIES GOLD ESTATES.—Mr. Harry James, the mine manager, reports by cable:—"Have examined the property; I consider the prospects most favourable, the lode is looking promising each lease; the appearance of Aurelia most encouraging; my advice is push ahead with further development of the property; I would recommend you to sink a shaft 3054 to intersect Crusoe lode; intend in the meantime to erect the mill as soon as possible; full report is sent by mail."

MOSMAN.—Cablegram from Charters Towers:—"Wyndham shaft. 267 tons of quartz have yielded 321 ounces of gold.—Peabody shaft. 87 tons of quartz for 84 ounces. The total yield from the above crushings is 354 tons for 405 ounces of gold, and the approximate value is £1400."

MOUNT MAGNET.—The following cablegram has been received from the general manager, dated April 20:—"Development upon the east lode 2 feet 9 inches, 20 dwts. per ton; auriferous deposits 8 feet, 30 dwts. per ton; main lode opening up well."

MOONIE CREEK.—The following cablegram has been received from Mr. Wrey, consulting engineer, dated Buluwayo, April 23:—"Recent advices inform us that property and stores are quite safe."

NORTH BOULDER.—The following information has been received from the mining manager by cable, dated April 22:—"Part of the machinery on ground. Battery excavations completed. Developments of importance taking place. Reef is widening out. Reef is yielding some very fine specimens."

NEW CHIMES.—The result of last month's crushing yielded 1692 ounces of gold.

NEW RIETFONTEIN.—The Johannesburg Consolidated Investment Company announce receipt of the following cable from the above company:—"A good report was presented at the annual meeting. Cash balance, £126,000; balance to the credit of the profit and loss account, £195,000; Rietfontein A scheme carried; mining prospects very good."

OURO PRETO.—This company has received a cablegram giving the March returns as follows:—"Passagem Mine. 4011 tons produced 1561 ounces.—Raposos Mine. 280 tons produced 37 ounces."

PENHALONGA GOLD.—The following cablegram has been received from the mine:—No. 2 adit has cut the vein after driving 960 feet long 5 feet. We are not yet through reef; samples from this assayed gold 32 dwts. per ton, silver 4 ounces per ton; samples will be sent."

PERMANENT NITRATE.—The following official telegram has been received from Iquique:—"20,300,000 quintals remain for export to all parts for the 12 months ending March 31 next. Directorate cannot increase until prices pass 6s., in which case will only increase the shipments according to requirements of consumption." In the terms of the Nitrate Combination agreement, any increase of exports must be decided upon not later than September 30.

ROSE HILL UNITED.—Cable report for week ending April 18:—"Work is being pushed ahead in main shafts. Have commenced driving in good stone."

SHEBA.—A cablegram has been received from the mine, intimating that the new general manager, Mr. Blow, has arrived, and also that the stopes continue to look well.

SILVER KING.—Cable from manager at the mines:—"First half of April, crushed 900 tons of ore; produced 6000 ounces silver."

ST. JOHN DEL REY.—The following telegram has been received from Mr. Chalmers:—"Produce nine days, first division April, 9500 oits., equal to 1095 ounces troy, value £3681; yield per ton, 5·7 oits. ('65 ounces troy.)"

UNITED MINES BULTFONTEIN.—The result of working is reported by the secretary of this company as follows:—"Since starting operations about the middle of December, 1895, to January 25, 1896, 44,948 loads of blue ground were washed, and 5999½ carat diamonds found, estimated at £4190 4s. 6d., and after deducting £2223 6s. 3d. for working expenses, including claim, licenses, and other charges, a profit of £1966 18s. 3d. was realised. For February the profit amounted to about £2000, and the result of working for the whole period from the commencement up to March 31, 1896, was 190,000 loads washed, producing 23,419 carat diamonds found, the estimated profit being £6600.

WAITEKAURI EXTENDED.—The following information has been received by cable from the mine:—"Auckland, N.Z., April 18.—Consider there is no doubt Golden Cross lode runs through Waitekauri Extended. We have cut eight reefs, proving main channel. Important results expected within a fortnight."

WHITE FEATHER EXTENDED.—Cable received from mine on April 20:—"Have commenced main shaft; present depth is 19 feet. The drive on the lode is now in 35 feet. Recent developments quite satisfactory."

YERRAKONDA.—Cablegram, dated April 23, from the mine:—"South shaft. Width of lode 2 feet 6 inches, assaying 6 dwts. of gold per ton."

ZEEHAN-MONTANA.—The following cablegram has been received from Hobart dated 21st. inst:—"Have shipped 140 tons of silver lead ore containing about 98 tons of lead and 12,600 ounces of silver."

IRON AND STEEL INSTITUTE.—The annual meeting of this Institute will be held at the Institution of Civil Engineers, Great George-street, Westminster, on Thursday and Friday, May 7 and 8, commencing each morning at 10·30 o'clock. The following is the programme of arrangements:—Thursday, May 7: 9·30 a.m.: Meeting of Council at 25, Great George-street.—10·30 a.m.: General meeting of members. The council will present their report for the year 1895. The Hon. Treasurer (William Whitwell, Esq.) will present the statement of account for 1895. Scrutineers will be appointed for the examination of voting papers. The Bessemer gold medal for 1896 will be presented to Dr. Hermann Wedding, of Berlin. A selection of papers (Nos. 3, 4, 7, 9, and 10) will be read and discussed.—7·0 p.m.: Annual dinner of the Institute at the Freemasons' Tavern.—Friday, May 8: 10·30 a.m.: General meeting of members at the Institution of Civil Engineers. A selection of papers (Nos. 1, 2, 5, 6, and 8) will be read and discussed. The following is a list of the papers that are expected to be read and discussed:—1. On the Rate of Diffusion of Carbon in Iron, by Professor W. C. Roberts-Austen, C.B., F.R.S. (Member of Council). 2. On Some Alloys with Iron Carbides, by J. S. de Benneville (Philadelphia). 3. On Mond Gas as Applied to Steel Making, by John H. Darby (Brymbo). 4. On Hot Blast Stoves, by B. J. Hall (Westminster). 5. On the Hardening of Steel, by H. M. Howe (Boston); adjourned discussion. 6. On the Introduction of Standard Methods of Analysis, by the Baron Hanns Jüpptner von Jonstorff (Neuberg, Austria). 7. On the Production of Metallic Bars by any Section by Extrusion, by Perry F. Nursey (London). 8. On Mr. Howe's Researches on the Hardening of Steel, by F. Osmond (Paris). 9. On the Treatment of Magnetic Iron Sand, by E. Metcalf Smith (Member of the New Zealand House of Representatives). 10. On the Making of the Middle Lias Ironstone of the Midlands, by E. A. Walford, F.G.S. (Banbury).

The Public SUBSCRIPTION LIST OPENS THIS DAY (Saturday), the 25th inst., and will CLOSE for TOWN and COUNTRY on or before WEDNESDAY, the 29th inst.

MELVILLE'S NEW ZEALAND CORPORATION (LIMITED)

Offers for subscription 70,000 SHARES AT PAR.

Payable 2s. 6d. per Share on Application, 7s. 6d. on Allotment, and the balance in Calls not exceeding 5s. each at intervals of not less than Two Months.

AND HAS GUARANTEED AN IMMEDIATE CASH WORKING CAPITAL OF £25,000

25,000 Shares being held in reserve for future issue if required.

(Any Shareholder may pay up the whole of his Shares in full and in anticipation of calls, and interest will be allowed thereon at 2 per cent. per annum.)

KURANUI-CALEDONIAN GOLD MINING CO., LIMITED,

HAURAKI GOLDFIELDS, THAMES DISTRICT, NEW ZEALAND.

Incorporated under the Companies Acts, 1862 to 1890.

CAPITAL ... ... £175,000.

PRESENT ISSUE, 150,000 SHARES OF £1 EACH.

The Articles of Association provide for the Issue of Share Warrants to Bearer.

DIRECTORS.

THOMAS MELVILLE, 19, Atholl Gardens, Glasgow, Director Melville's New Zealand Corporation, Limited.
WILLIAM LUNAN, 5, West Regent Street, Glasgow, Director Waihi Silverton Extended Gold Mining Company, Limited.
EDWARD WALMSLEY, 93 and 94, Gracechurch Street, London, E.C., Director Hampton Lands and Railway Syndicate, Limited.
GEORGE COWIE, 31, Philbeach Gardens, London, S.W., formerly of New Zealand.
OLIVER HENRY DAVIS, 28, Budge Row, E.C., Director Waihi Silverton Extended Gold Mining Company, Limited.
F. E. HARMAN, M.I.M. and M., 20, Warwick Gardens, Kensington, W., Director Rhodesia Gold Reefs (Purdon's), Limited.

LOCAL COMMITTEE.

The following Gentlemen will be invited to act:—
J. A. POND, F.C.S., Auckland, Chairman of Local Committee of Waihi Silverton Extended Gold Mining Company, Limited.
JOHN R. GRAY, Auckland, Member of Local Committee of Waihi Silverton Extended Gold Mining Company, Limited.
J. M. LENNOX, Auckland, Director Hazelbank Gold Mining Company, Limited.

BANKERS.

THE COMMERCIAL BANK OF SCOTLAND, LIMITED, 62, Lombard Street, E.C.: Head Office, Edinburgh, and Branches in Scotland.
THE BANK OF NEW ZEALAND, 1, Queen Victoria Street, London, E.C.

BROKERS.

Messrs. FAITHFULL BEGG & Co., Bartholomew House, and Stock Exchange, London, E.C.
Messrs. CUTCLIFFE, LEY, & McCULLOCH, 7, Adam's Court, and Stock Exchange, London, E.C.

SOLICITORS.

Messrs. HEPBURN, SON, & CUTCLIFFE, Bird-in-Hand Court, Cheapside, London, E.C.

CONSULTING ENGINEERS.

Messrs. TOUZEAU & JANSON, Leadenhall Buildings, London, E.C.

SECRETARY AND OFFICES.

P. S. BROWNING, 20, Great Winchester Street, London, E.C.

ABRIDGED PROSPECTUS.

This Company has been formed to acquire the valuable mining properties situate at the Hauraki Goldfields, in the Thames District of New Zealand, known as the Hazelbank (including the celebrated Old Caledonian Mine) and the adjoining property known as Kuranui No 2 Licensed Holding, the total area being 9a. 3r. 11p., or thereabouts. There is a 20-stamp battery on the property, and it is proposed to add modern Gold Saving machinery, and to develop and work the mines at the existing levels and to extend the workings in depth. The Property is situate on the sea coast some 45 miles south-west from the City of Auckland, from whence there is daily communication by steamer. The value of this ready transit for machinery and supplies, which can be landed at the wharf a few hundred yards from the mines, will be appreciated by all who are familiar with the difficulties arising from an absence of such facilities in other gold fields.

The following figures, taken from the records obtained at the banks and elsewhere, give as nearly as can be obtained the quantity of gold won from the respective mines, which are contiguous to or immediately adjacent to the property to be acquired: Queen of Beauty, £359,973; Moanatairi, £372,402; Hunt's Claim (Kuranui No. 2), £160,093; New Prince Imperial, £114,828; Cambria, £36,640; Waiotahi, £72,322; Golden Crown, in dividends for one year only, £200,000. The Kuranui No. 1 has paid £82,000 and the Old Caledonian £650,000 in dividends. The Old Caledonian Mine has thus been by far the largest gold producer in the district, notwithstanding that the mine is practically unexplored below the 347 foot level (see Report of Mr. James Coutts, Mine Manager, herewith).

It will be seen from the experts' reports that the battery can be kept going on the low grade surface stuff from the Kuranui Hill, while the work of proving the Eastern section of the Kuranui No. 2 ground proceeds, as recommended by Messrs. Coutts and Adams, who state in their report as follows: "When a winding engine is erected in this shaft, which can be done at little expense, operations could be commenced at the 150 foot level in a short period of time, and we would advise that this work be taken in hand as soon as possible, as it is highly probable that a rich run of gold will be found in the Eastern section of the property." Mr. Clark in his report says: "The Albion shaft (which is already down 202 ft., and is one of the best on the field, being 12 ft. by 7 ft. timbered with sets of 10 ft. by 10 ft. heart of Kauri timber) is admirably situated for the working of the ground at the lower levels. The Caledonian Nos. 1 and 2 reefs would be intersected at a depth of about 800 ft., and by sinking 200 ft. deeper and then driving in a northerly direction, I believe a new floor of gold-bearing country would be found."

An important fact in connection with economical working of the Mines is that this Company is entitled, free of charge, to access to the Moanatairi Tunnel which traverses the Kuranui No. 2 ground from end to end. The mines of this group are at present drained by what is locally known as the "Big Pump," controlled by the Thames Drainage Board, which is empowered to rate mining properties for this purpose. This pump has only been worked to keep the water down to about 450 feet.

For many years past efforts have been made to amalgamate the mining interests within the drainage area, with the object of securing more efficient drainage so as to permit of working at lower levels. Eventually the Government was induced to offer a pound for pound subsidy up to £25,000, thus providing a total of £50,000, for the erection of pumping machinery capable of draining to a depth of 2000 feet. The required sum has been provided by a London Company, and the work is now in hand. The Act provides for the payment of a contribution by all mines benefitted by the drainage effected. The fact that the New Zealand Government granted the subsidy referred to is proof of their confidence in the value of the lower levels. The Hon. A. J. Cadman, Minister of Mines, speaking on 22nd January, 1896, said: "A contract had been let for the necessary machinery, and when it comes out it would be the greatest machinery in the Southern Hemisphere. For instance, it would be capable of lifting 20·0 gallons of water per minute to a height of 2030 feet. The Government would contribute £25,000, and the shaft would not belong to any one person or company, but all might have the use of it upon paying a fair charge."

The high opinions held by official experts as to the value of the lower level accompany the Prospectus.

The following mining authorities have reported on the properties now under offer:—James Coutts, the Mine Manager, on the Hazelbank Mine; on Kuranui No. 2, G. S. Clark, Mine Manager of the Moanatairi Mine; and James Coutts and E. P. Adams.

The purchase consideration has been fixed by the Vendors, Melville's New Zealand Corporation, Limited, at £125,000, payable as to £15,000 in cash, £70,000 in fully-paid Shares, and the balance in cash or fully-paid Shares, or partly in cash and partly in shares at the option of the Directors. The Vendors defray all the expenses incidental to the formation of the Company and the issue of capital up to allotment, except Government Duty payable on Registration.

For contracts see full prospectus.

Applications for Shares can be made on the following form and sent with the required deposit to the Company's Bankers. If the Shares allotted be less than the number applied for, the surplus of the amount paid on deposit will be appropriated towards the amount due on allotment, and where no allotment is made the deposit will be returned in full.

Prospectuses and Forms of Application may be obtained from the Bankers and Brokers, and at the Offices of the Company.

25th *April*, 1896.

FORM OF APPLICATION FOR SHARES.

The KURANUI-CALEDONIAN GOLD MINING COMPANY (Limited.)

Capital £175,000, in 175,000 Shares of £1 each.

To the Directors of the Kuranui-Caledonian Gold Mining Company (Limited):

Gentlemen,—Having paid to your Bankers the sum of £....., being 2s. 6d. per Share payable on application for..... Shares of £1 each, I request you to allot me that number of Shares, and I agree to accept the same or any smaller number that may be allotted to me, upon the terms and conditions of the Prospectus, dated April 25, 1896, and the Memorandum and Articles of Association of the Company, and I authorise you to place my name on the Register of Members in respect of the Shares so allotted. I agree with the Company, as Trustees for the Directors and other persons liable, to waive any fuller compliance with Section 38 of the Companies Act, 1867, than is contained in such Prospectus. In the event of my not receiving an allotment, the amount to be returned in full.

Name (in full) .....
Address .....
Description.....
Ordinary Signature.....
Date..... 1896.

COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

THE LINARES LEAD MINING COMPANY (LIMITED)

The report of the directors of this company, to be presented at the forthcoming half-yearly meeting, contains the following passages:—The last half of the year 1895 has closed with a profit for that period of £8192 8s. 8d.; this, with the £6442 17s. 10d. of the previous six months, shows a total profit for the year of £14,635 6s. 6d. Better prices for lead have prevailed during the period embraced by these accounts, and if this improved state of things should continue good profits and satisfactory dividends may still be expected to result from the company's mining operations. Since the formation of the company in 1849 the profits have been as follows:—Total profits prior to December 31, 1855, £48,826 2s. 2d.; total profits for 10 years to December 31, 1865, £127,673 3s.; total profits for 10 years to December 31, 1875, £76,691 12s. 8d.: total profits for 10 years to December 31, 1885, £67,309 18s. 3d.; total profits for 10 years to December 31, 1895, £104,753 17s. 1d.; total profits, £425,254 13s. 2d. During the last decennial period, viz., to December 31, 1895, when the profits were so satisfactory, lead, for the greater part of that time, was exceedingly low in price. For this, however, there was considerable compensation resulting from the economies effected in working the mines, cheaper transport, help from the tributers' ore, &c. It is a remarkable feature that after being worked for 46 years the mines still yield good profits, and that they contain reserves of discovered ore reaching 7000 tons. The financial position of the company was perhaps never stronger than at the present time. Up to November last the needed funds for the working of the mines were provided by the superintendent's draft on the directors, drawn at three months' date, and negotiated at Madrid, but the directors having accumulated sufficient funds now remit cash monthly to Spain, thus dispensing with bills altogether, and thereby effecting a saving in exchange. In order still further to strengthen the company's financial position, the directors recommend that out of the profits of the past half-year the sum of £1000 be written off from the mines, buildings, and machinery account as depreciation. The operations at the mines have proceeded without interruption during the past six months, and the cost of working has been moderate. During the current half-year it is hoped that good ore ground will be opened up at the old mines, both in the 200 fathom level west of Peill's engine shaft, and in the same level west of Warne's crosscut, whilst at the Quinientos Mine the development of the 165, the 185, and the 200 fathom levels east of Taylor's engine shaft all give promise of encouraging results. At the smelting works everything has proceeded with regularity, a larger quantity of ore has been treated, and the results in regard to the produce obtained were similar to those of the previous half-year. The balance at the credit of the profit and loss account on December 31 last was £8446 10s. 5d.; less dividend 9s. per share, paid 11th inst., £6749 2s.; depreciation account, £1000; leaving balance to carry forward £697 8s. 5d.

THE FORTUNA COMPANY (LIMITED).

The following report of the directors of this company will be presented at the forthcoming half-yearly meeting:—The directors are pleased on the present occasion to present the half-yearly statement of accounts to December 31 last, because it shows a profit of £1972 1s. 3d., which is nearly double the amount of the profit for the previous six months. This improved result was obtained, notwithstanding that there was a lessened production of ore during the past half-year; the gain arose from the fact that better prices were obtained for the lead sold, and at the same time the costs of working were lower. The directors felt that the profit of the past half-year did not justify them in dividing more than 1s. per share in the form of dividend, as they considered that a sum of £250 should again be taken from the profit and loss account, and written off from the "mines, buildings, and machinery account" as depreciation, the reserves of ore having been lessened to the extent of 500 tons during the six months; they now stand at 1500 tons only. It is scarcely likely that the production of ore can continue at its present out-turn unless there be a substantial improvement in some of the levels which are now being worked. The profits made by this and other companies in the Linares district, encourage the belief that it will probably continue to be a profitable channel for the investment of capital. This company, since it began making dividends in 1862, has divided amongst the shareholders the large sum of £296,250; this represents an average dividend of 17·42 per cent. per annum for the entire period of 34 years. The company is strong in its finances, the assets far exceeding the liabilities, and further, the company possesses a reserve fund of £4293 5s. 4d. invested in 2½ per cent. Consols, which at the present price of 110 represents £4722. Thus the company finds itself in possession of a large capital, which hereafter may be turned to good advantage. The directors are now able to utilise some of the company's capital by dispensing with three months' bills, and furnishing the superintendent with funds monthly from England, thereby effecting a saving in exchange. The mines and smelting works are all being carried on with their accustomed regularity—the operations being described in detail in the reports do not call for special comment. The balance at the credit of the profit and loss account will stand as follows:—Amount as per balance-sheet, £2149 3s. 9d.; less dividend of 1s. per share paid 11th inst., £1250; depreciation account, £250; reserve fund, £62 10s.; balance to carry forward £586 13s. 9d.

THE ALAMILLOS COMPANY (LIMITED).

The directors, in their half-yearly report to the shareholders, which will shortly be presented at the general meeting, state:—The work done at the mines during the six months ending December 31st last was very encouraging in its results, as there was an important improvement in some of the lodes, and this has made the outlook for the future more cheerful than it has been for some years past. The profit was £3480 14s., compared with £2867 9s. for the previous half-year, and the directors have accordingly been enabled to pay a dividend of 1s. 9d. per share, compared with 1s. 6d. per share in the preceding six months; but it is the improvement in the mines to which the directors attach the greatest importance, as this will help to give more permanence and value to the company's property. During the past half-year there was a notable improvement in the lode in the 40 fathom level east of Santa Agueda shaft, the average yield of which from October last has been 2 tons of lead ore per fathom. The lode in the 100 fathom level east of Judd's engine shaft also improved, until it reached 4 tons per fathom in January last. Other improvements have taken place, so that the prospects of the mines are decidedly hopeful. These improvements mostly occurred towards the close of the half year; the reserves of the discovered ore are not, therefore, reported higher than in September last—viz., 3200 tons. The company's finances are in a healthy state, and this enables the directors to make some small saving in the working costs by furnishing the superintendent with cash by remittances from England. Formerly the superintendent drew upon the directors at three months' date, and negociated his drafts in Madrid, but in times of financial distrust such drafts were apt to be difficult of negociation, whereas the present system places the company on a safe footing in regard to its finances. Everything has proceeded satisfactorily, both at the mines and at the works at Cordova. At the same time, the transport department has been conducted with regularity, so that on no occasion has there been any large accumulation of stocks of lead. The directors propose on the present occasion to write off the sum of £400 as depreciation from the buildings and machinery account. The profit and loss account will then stand as follows:—Balance at the credit of the account December 31 last, £3637 4s. 9d.; less dividend of 1s. 9d. per share paid 11th inst., £3062 10s.; depreciation account, £400; leaving a balance to carry forward of £174 14s. 9d.

DOLCOATH MINE.

A circular to the shareholders runs as follows: I am desired to report to you the following summary of the operations of the Company during the past three months and the present position of the various works in progress. During that period 147 fathoms of ground have been opened up by driving, sinking, &c., and 14,389 tons 7 cwt. and 3 qrs. of ore have been mined. The quantity of tin sold was 507 tons 18 cwt. and 27 lbs., which produced at an average price of £37 0s. 5d. per ton, £18,813 4s. 9d. Many important works have been pushed forward and are approaching completion. Everything is ready for sinking the Stray Park shaft when it has been cleared out about another 10 fathoms, or down to its present bottom of 292 fathoms. Twenty new heads of stamps will be ready for work in another three weeks or a month. The new sorting floors, stone breaker, and tram roads at the eastern shaft are affecting a saving of about one-half in the cost of putting the ore into the stamps. In addition to the new frames on the dressing floors reported to the recent general meeting as having been erected, and as having greatly reduced the cost of saving tin, another set is being constructed and will be at work about the end of June. For the New Sump shaft a powerful winding engine and boiler have been purchased, the loadings and foundations for the same have been built and the engine is being rapidly erected. New steel head-gear has been ordered and should be delivered and erected in about a month. The skip road has been altered and repaired. These arrangements will ensure rapid winding and getting the men quickly to their work. The old workings are being searched in the shallow levels for arsenic, the price of which is now very high, and some fairly productive ground has been found on the South Entral lode. The Williams' shaft has been sunk 147 feet and is being lined with brick. It will be seen that the time has not yet come for reaping the full benefit of the different works which have been undertaken with the object of increasing the efficiency and the economy of the company's operations. The price of tin during the last three months has averaged £2 3s. less per ton than the average of the previous six months. Hence the profits have not reached a sum which, in the opinion of the directors, justifies them in declaring an *interim* dividend. The reduction of cost in working, which it seems probable will be shortly effected, will enable the company to increase the output by working lower grades of ore. This alone should enhance the profits, while if it is hoped by a rise in the price of tin, the results cannot fail to be very satisfactory to the shareholders. A call of 2s. 6d. per share on the partly paid shares has been made by the board to enable them to carry on the improvements for which the capital was subscribed.

THE FLAGSTAFF COMPANY.

A circular to the shareholders, accompanying the notice of call, says:—"In forwarding the enclosed notice of call, I am instructed to inform you that the money is principally required to pay for the crushing and other machinery which is now being ordered. Great difficulty has been experienced in determining the class of machinery suitable for our ores. The directors have, however, selected a plant capable of dealing with 15 to 20 tons of quartz per day, either by wet or dry crushing as may be found most suitable, and it is so arranged that it can be promptly supplemented to keep pace with future developments. Pending the erection of the 'Mill' the directors are endeavouring to arrange for the treatment of the ore now on the surface at neighbouring batteries. Various trials have been made, but the amount of gold left in the tailings, and the heavy prices harged for milling, have prevented them from entering into arrangements for crushing on a large scale up to the present. Samples of ore from the Star Mine were recently received in London, portions of which were assayed by Messrs. Claudet with the following results:—10 lbs. of ore assayed 26 ounces 16 dwts. of gold per ton; tailings from 16 tons of ore, treated at Bayley's No. 1, assayed 8 ounces of gold per ton. These 'samples' can only be looked upon as specimens, but they prove the existence of high-grade ore in the mine. The remainder of the specimens can be seen by shareholders at the company's offices. The company has recently secured an option, on advantageous terms, for the purchase of two leases adjoining the Star Mine, and the directors have every reason to believe that if purchased these leases will add greatly to the value of the company's property. Further reports on these, with samples, are on their way to London, and the directors are informed that the following, which appeared in the *Financial News* of April 10, refers to one of the leases included in the option:—'Rich stone has been struck on the surface at Little Dick, adjoining the Star, Sherlaw, and Orient Leases in Coolgardie. A fine auriferous reef has been discovered at a depth of 40 feet.'"

QUEBRADA RAILWAY, LAND, AND COPPER COMPANY (LIMITED).

A meeting of the holders of prior mortgage debentures of the Quebrada Railway, Land, and Copper Company (Limited) was held yesterday at Winchester House, E.C., Mr. H. W. Smithers presiding.—The Chairman explained that the meeting was summoned pursuant to the directions of the High Court of Justice, and was for the purpose of giving them an opportunity of approving of the scheme of arrangement to be made between the company and its debenture holders, debenture stockholders, and certain other creditors, and the shareholders. It was proposed to surrender to the creditors in discharge of their debts the property of the company other than its mines and accessories which would be reserved for the shareholders. The prior lien debenture-holders would receive in the new company debenture stock at the rate of £100 for every £90, and also the two year's interest of 6 per cent. in cash. He then moved that the scheme be approved.—Mr. Wenham seconded the resolution, and it was carried.—Subsequently a meeting of the holders of the debenture stock was held for the same purpose.—The Chairman, in moving the necessary resolution, explained that it was proposed that the railway and its appurtenances should be given them, and they would be owners subject only to mortgage of £150,000, created for the purpose of satisfying certain claims. The new company would start with a capital of £500,000, and a debenture capital of £150,000. Each holder of the existing debenture stock would be given in the new company the nominal amount of his stock and two years' interest thereon at the rate of 6 per cent.—Mr. Cole seconded the motion, and it was agreed to.—This meeting was followed by an extraordinary general meeting of the shareholders in the company, also convened for a similar purpose.—Mr. N. G. Burch, who presided, explained that the new company to be formed for the benefit of the shareholders would be concerned with the mines only. The capital would be £150,000, consisting of 150,000 £1 shares, credited with 18s. paid. Therefore the actual working capital to be subscribed was 2s. per share, which would realise £15,000. If the shareholders did not fall in with the scheme they would lose all the money they had invested, as the creditors of the company had the matter practically in their own hands.—The resolution approving of the scheme was then carried, and the meeting terminated.

BRITISH BROKEN HILL PROPRIETARY COMPANY (LIMITED).

The Directors' report for the half-year ending December 31, 1895, is as follows: The clear and able report by Mr. Retallick, the Company's Manager at Broken Hill, annexed hereto, leaves little to be added by the Board with regard to the work done at the mine down to the 31st December 1895, or as to its condition and prospects at that time. It will be observed that by dint of perseverance the massive and hard intrusion to the west of both Blackwood and Howell Shafts at the southerly end of the mine has at last been pierced at the 300-feet level, and that the cross-cuts from both shafts are a considerable distance in sulphide ore of a valuable description; giving every probability of solid masses of ore at least 100 feet in depth between the 200-feet and 300-feet levels, and extending at least as far in length as the distance between the two shafts. The success of these operations strongly confirms, and indeed, goes beyond the report of Mr. Greenway (a metallurgist and mining expert of high repute), which arrived shortly after our last meeting, and of which only a cabled summary could then be given. In respect of the increased value of the mine, consequent on these and other developments, the directors have credited the mine with the sum of £2,000, being the same amount as was similarly credited during the previous half year, the whole cost of the development work (amounting to £6,817 4s. 10d.) having been charged to the working account. The Directors have again the satisfaction of noticing that the investments made of the Company's reserves of working capital stand at a considerably higher market price than their cost, or than their market price at the close of the previous half-year. The remaining items in the accounts for the half-year call for no special remark. The six months which have elapsed down to the date of this report of the Directors have been occupied in the erection of concentrating machinery at the mine on Hancock's system, and the zeal and energy of the Colonial Directors have been such as to deserve the cordial approval of the shareholders. They have grudged neither time nor labour in obtaining the best advice and the best estimates for the necessary buildings and plant, and in providing for their erection in the best manner, and the reports received here express great satisfaction with the work and progress attained. It appearing that far more profitable returns would be given by a plant capable of dealing with 2,000 tons of ore per week, than by a plant working up to 1,000 or 1,200 tons only, the plans for the machinery and buildings have been framed so as to deal with the larger quantity, and the concentrators have been built and constructed on lines of great solidity and efficiency. This has necessarily involved a somewhat larger cost than was anticipated, but the Directors consider that the additional outlay has been of great advantage to the Company. By the end of the present month the Board hope to receive a cable that the plant has been completed in all respects, except the buddles, and has started working on the carbonate ore; and that the buddles will also be finished within a few weeks thereafter; thus enabling the manager to deal at any time with the sulphide ore. But for the first six months the mill will be fully employed on oxidised ores, and already the mine manager is well ahead with his reserves at grass, in order to prevent the possibility of any stoppage in the supplies required for so large a plant. The directors do not doubt that the process will turn out profitable, and having regard to the very large reserves of ore exposed in the mine, and other bodies of ore which may be expected from further developments, they have every confidence that the Company may become and continue a dividend-paying concern.

Other markets for the Company's ores, both concentrated and the higher grade of crude sulphides, appear to be opening up, and the London directors are busily watching every opportunity which may offer for disposing of the products of the mine to the best advantage, as well as for utilising the ores rich in zinc by some improved method of extracting that metal. The Broken Hill Proprietary Company relinquished the lease of our furnaces on February 28, and your directors have since entered into a provisional agreement with another company for a lease of them on advantageous terms, as also for the disposal of a large quantity of both concentrated and crude ore. If this provisional agreement is carried into effect, your directors believe your mine will be on the dividend paying list before they again have the pleasure of meeting you. You will also be gratified to learn that through strong representations made by the Colonial Committee to the Government, we have succeeded in obtaining a considerable reduction in the carriage of our carbonates to the shipping port—from 21s. 8d. to 13s. 8d. per ton. Certainly our prospects have never been more promising.

ASSOCIATED GOLD MINES OF WESTERN AUSTRALIA (LIMITED).—At a meeting of the board held on Wednesday last, Messrs. John Taylor and Sons were appointed consulting engineers in London to the company, and it was announced that the first portion of the recently-ordered machinery (equivalent to 20 stamps) would be ready for shipment within the next week or 10 days.

THE SPANISH IRON ORE TRADE.—There was an exceedingly active state of affairs in the Spanish ore trade during the past month, no less than 403,070 tons ore having been shipped to British ports alone, as compared with 398,943 tons in the preceding month, and 309,182 tons in March last year. The development which this trade has this year undergone is well shown by the figures for the three months ending with March. During that period no less than 1,196,369 tons of iron ore were shipped from Spain to the United Kingdom, as against only 794,793 tons in the corresponding period of last year, and 963,352 tons in the first quarter of 1894.

Letters of allotment to applicants for shares in the NEW ALBURNIA GOLD MINING COMPANY (LIMITED) have been posted.

THE offices of the COBAR GOLD MINES (LIMITED) have been removed to 32, Old Jewry, E.C., and Mr. Walter Bramall has been appointed secretary.

— The certificates of the ARMADALE GOLD MINING COMPANY (LIMITED) are now ready, and will be delivered in exchange for the application and allotment receipts on and after the 23rd instant.

THE directors of Rhodesia (Limited) have appointed Mr. L. H. Hirschler as their general manager in Rhodesia, and Mr. J. C. Knapp, late of the Knapp Syndicate, as the local managing director of the company in Rhodesia.

DIARY.

Monday, April 27.

Elmore's German and Austro-Hungarian Metal Company, Winchester House, 12.
Chimes West, Johannesburg.

Tuesday, April 28.

Total Gold Extraction Company, 32, Old Jewry, 10.30.
New Guston, Winchester House, 12.
London and W.A. Exploration, Broad Street House, 12.30.
American Belle, Winchester House, 2.
Westleigh Mine, Johannesburg.

Wednesday, April 29.

Royal Montefiore Gold, Cannon Street Hotel, 11.30.
Loma Gold, Winchester House, 12.30.

Thursday, April 30.

Australian Broken Hill Consols, Winchester House, 12.
City of London Gold, Cannon Street Hotel, 12.
Linares, 6, Queen Street Place, 1.
Fortuna, 6, Queen Street Place, 1.30.
Alamillos, 6, Queen Street Place, 1.45.
North Swaziland, Winchester House, 2.
Rio Tinto, Cannon Street Hotel, 2.
Pontpéan Silver Mines, Rennes, 2.
Durban Roodepoort, Cannon Street Hotel, 2.30.
United Buffelsdoorn, Johannesburg.

The SUBSCRIPTON LIST will OPEN on MONDAY, the 27th April, and CLOSE on THURSDAY, the 30th April, for both TOWN and COUNTRY.

THE UNIVERSAL CORPORATION OF WESTERN AUSTRALIA (LIMITED) INVITE SUBSCRIPTIONS TO THE UNDERMENTIONED ISSUE.

THE Towranna Gold Mines of Western Australia, Limited.

INCORPORATED UNDER THE COMPANIES' ACTS, 1862 TO 1890, WHEREBY THE LIABILITY OF SHAREHOLDERS IS LIMITED TO THE AMOUNT OF THEIR SHARES.

Two proved Gold Mining Leases of 25 acres each, upon which steady development work has been done for the past eight months. Three distinct reefs and a great number of leaders upon them, showing from 1½ ozs. to over 17 ozs. of gold per ton. 3000 tons of ore in sight, thousands of tons of rubble of from two to three feet in depth upon the property, estimated to yield from 1 to 2 ozs. per ton.

MR. BRENTON SYMONS, the eminent Mining Expert, who has lately visited the Towranna District, states he was much impressed with the highly auriferous character of the same, "the character of the enclosing rocks, the well-defined lodes traversing them, the quartz of which shows more or less gold in every pailful of dirt washed, promises to make this Goldfield a very successful one."

CAPITAL - - - - - - - - £125,000

Divided into 125,000 Shares of £1 each, of which 42,300 will be allotted to the Vendors in part payment of the purchase consideration.

ISSUE OF 82,700 SHARES AT PAR.

Payable 2s. 6d. per Share on Application, 7s. 6d. on Allotment, and the balance in calls of 5s. each at intervals of not less than one month.

DIRECTORS.

C. W. MANSEL LEWIS, Esq., J.P., Stradey Castle Llanelly, South Wales (Chairman)
STAFFORD JERNINGHAM, Esq., J.P., Costessey Park, Norwich.
SIDNEY W. COXON, Esq., 7, Leonard Place, Kensington, London, W.
MAJOR CHARLES B. PRUST, J.P., Chairman Universal Corporation of Western Australia (Limited), 167, Holland Road, Kensington, W.
H. McDOWELL, Esq., Director Universal Corporation of Western Australia, (Limited) 31, Aldford Street, Park Lane, London, W., and Oatlands Park, Weybridge

BANKERS.

LONDON—Messrs. BROWN, JANSON, & CO., 32, Abchurch Lane, London, E.C.
WESTERN AUSTRALIA—WESTERN AUSTRALIAN BANK, Perth and Branches.

SOLICITORS.

Messieurs. BIRCHALL, 85, Gracechurch Street, London E.C.

BROKER.

JOHN HOWARD GILL, Esq., Bartholomew House, Bartholomew Lane, London, E.C., and Stock Exchange.

AUDITOR.

GEORGE S. BURT, Esq., Chartered Accountant, Winchester House, Old Broad Street, London, E.C.

CONSULTING ENGINEER.

THOMAS COLLINGWOOD KITTO, Esq., M.E., Cedar Lodge, Isleworth, Middlesex.

SECRETARY AND OFFICES.

A. S. PEAKE, 239 to 241, Gresham House, Old Broad Street, London, E.C.

ABRIDGED PROSPECTUS.

This Company has been formed for the purpose of acquiring and working two valuable gold mining leases, Nos. 269 and 270, of 25 acres each, known respectively as the "Castle" and "Edith" leases, situated at Towranna in the North-West Goldfields of Western Australia.

These leases were first taken up in July, 1895, when there was a rush to the district, by a prospecting party under the leadership of Dr. Clements, a gentleman of great experience in mining matters, since which time they have been vigorously developed under his superintendence, with the result that their great value has been fully demonstrated, the present, therefore, is considered an appropriate time thoroughly justified by the developments effected to equip the mines with all necessary machinery, &c., in order to commence crushings at the earliest possible moment.

Towranna is situated some 20 miles from the Port of Balla Balla, with which it is connected by good level roads, and the building of a railway is projected which will pass within a very few miles of the mines. A plentiful supply of water has been struck on the adjoining leases, so that all questions of transport and economic conditions of working the properties have been solved.

Five shafts have been sunk upon the leases at varying depths up to 70 feet, and these have proved the existence of three distinct reefs improving in width as they go down, the greatest width being met with in the deepest shaft.

The Property was reported upon in November last by Mr. A. H. Salmond, Government Mining Surveyor and Engineer of Roeburne, W.A.

With a view of ascertaining the present condition of the Mines, Mr. Salmond was instructed to re-visit the properties, and enable the result of the later developments. The following are extracts from his cabled report, dated 8th April, 1896:—

"There are three reefs on the property varying in width from one to three feet.

"There are five shafts sunk on the vein, varying in depth from 10 to 70 feet. Greatest width of reef at 70 feet by all indications will probably widen.

"Every probability that reefs pass through the whole length of the property.

"The gold quartz is very free, no base metals present; 3000 tons of ore in sight, developments opening up ore bodies. A railway is projected which will pass within a very few miles of the mine. The mine is situated 20 miles from the seaport of Balla Balla. The roads are fine natural ones.

"I consider it a most valuable propeaty."

Samples of the ore taken from the mine have been assayed by Mr. Benedict Kitto, F.G.S., F.I.C., of St. Swithin's Lane, London, with the following results:—

GOLD	17 ozs. 8 dwts. 21 grs. per ton of 2240 lbs.
SILVER	1 oz. 1 dwt. 1 grs. per ton of 2240 lbs.

As further instancing the rich character of the quartz, two trial crushings of two tons each have been made with quartz taken from the reef of an adjacent property known as the "Yellow Aster," the same reef running into this Company's leases, the first crushing yielding 4 ozs. 13 dwts. 9 grs. per ton, whilst the second crushing returned 5 ozs. 15 dwts. per ton, a further crushing from a property adjoining the "Yellow Aster," known as "The Golden King," yielded 11 ozs. 6 dwts. of gold per ton (see accompanying map for "Yellow Aster" and "Golden King" leases.) Three other claims have been pegged out at the Southern end of the "Castle" lease, all showing good gold in the stone.

Towranna District has lately been visited by the eminent mining expert, Mr. BRENTON SYMONS, and in reporting upon it he states that he was much impressed with the highly auriferous character of the same. "The character of the enclosing rocks, the well-defined lodes traversing them, the quartz of which shows more or less gold in every pailful of dirt washed, promises to make this gold field a very successful one."

Two of the Directors, being Directors of the Vendor Company, will not join the Board until after allotment.

The Contracts, Reports, Plans, Memorandum, and Articles of Association, and samples of ore can be inspected by intending Subscribers at the offices of the Solicitors of the Company. Application for shares should be made on the accompanying form, and forwarded to the Company's Bankers, together with a remittance for the amount payable on application.

Full Prospectuses and Forms of Application may be obtained from the Bankers, Solicitors, Broker, and at the Offices of the Company.

THE COOLGARDIE AUSTRAL GOLD MINING PROPRIETARY, LIMITED.

Prospectuses will be ready on Monday Next.

A WELL-DEVELOPED MINE 30 ACRES IN EXTENT,

AND WITHIN ONE MILE AND A HALF OF COOLGARDIE RAILWAY STATION.

The Directors, before submitting the Prospectus to the Public, obtained a Report by the well-known Expert, Mr. ZEBINA LANE, Manager, of the Great Boulder Mines, who says:—

"Several shafts have been sunk on the leases, the main one being down at the time of my last inspection to a depth of 100 feet, the last 40 feet being on the underlay and following the course of the lode. The average width of the lode at this point was about 8 feet—laminated quartz with iron gossan intermixed—from wall to wall.

GOLD COULD BE SEEN AS THE STONE WAS BROKEN,

and fair average samples taken from the heap in bulk gave an

ASSAY OF ONE AND A HALF OUNCES TO THE TON,

the gold being fine and evenly distributed throughout the matrix. Two other shafts, 60 feet and 80 feet deep, prove the course and continuity of the lode."

The SUBSCRIPTION LIST will OPEN on MONDAY, the 27th April, and CLOSE for LONDON, COUNTRY, and the CONTINENT at or before 4 p.m. on WEDNESDAY, the 29th April, 1896.

Bankers.

MESSRS. BROWN, JANSON AND CO., ABCHURCH LANE, LONDON, E.C.

Brokers.

MESSRS. E. B. HASELDEN AND CO. 27, THROGMORTON STREET, AND STOCK EXCHANGE, LONDON, E.C.

Offices

DEVONSHIRE CHAMBERS, BISHOPSGATE STREET, E.C.

L. LE PERSONNE & CO., London, E.C.
Telephone, No. 15,144. Telegraphic Address: "Lepersonne, London."
Codes, A.B.C., MACNEILL, MORSING.
MINERAL, METAL, IRON, AND MERCHANTS AND BROKERS.
EXPERIENCED AGENTS appointed in the COLONIES and FOREIGN MARKETS where not represented.
(Zinc, Lead, Silver Lead, and Copper Ores' offers specially invited.)

C. PASS & SON (Limited), BRISTOL,
ARE BUYERS OF
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,
ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c.
and DROSS or ORES containing
TIN, COPPER, LEAD, AND ANTIMONY.

HENRY WIGGIN & CO. (Limited),
NICKEL AND COBALT REFINERS,
MAKERS OF BEST RED LEAD FOR FLINT GLASS MANUFACTURERS,
BIRMINGHAM.

LAMBERT'S WHARFAGE CO.,
PRINCE OF WALES DOCK, SWANSEA.
Ores, Mattes Regulus, and Bars received and prepared for market.
Copper, Lead, Tin, Spelter, and Pig Iron Received, Weighed, and Sampled, and Warrants issued against same.
N.B.—Warrants are on Accepted List of London Metal Exchange.
Regular lines of steamers from America, Europe, &c.
Good prices can be obtained for low produce Copper Ores. Send air samples of not less than half a pound.

THE AUSTRALIAN GOLD RECOVERY COMPANY (Limited).
(MACARTHUR-FORREST PROCESS).
All information and terms regarding Plants and the Licensing of this Process can be obtained on application to:
THE AUSTRALIAN GOLD RECOVERY CO. (Ld.), 23, College Hill, London, E.C.
JAMES R. FOWLER, Esq., 14, King William Street Adelaide; or
GORDON WILSON, Esq., The Australian Gold Recovery Company (Limited), Charters Towers, North Queensland.

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LONDON: APRIL 25, 1896.

MEYER AND CHARLTON.

UNFORTUNATELY, as the weeks pass by, the uncertainty surrounding the political future of the Transvaal does not disappear, and public anxiety is not in the least alleviated. With that future, of course, are bound up the destinies of the great mines of the Rand, and though the prospects of the leading companies may be of the most brilliant description, nevertheless they may easily be upset by warlike events. We do not say that such eventualities are probable, but merely that it would not be well calmly to ignore their possibility. But, in considering the position and prospects of any one concern, we must proceed as though political affairs were in their normal condition; for we must not allow uncertain contingencies to weigh with any expression of opinion or prediction. Such a course is not only the safest, but the only possible one, for whatever happens, favourable or unfavourable, no one can calculate their effects. The Meyer and Charlton Company has long been a favourite amongst the investing community, and though in some respects the past year was a disappointing one, it does not follow that the prospects are discouraging. Twelve months ago the Chairman indulged in very sanguine predictions, which were not by any means realised. But no one at that time could have foreseen that the quality of the reef would deteriorate, thus greatly diminishing the profits. When the new mill was started a profit of from £8000 to £12,000 was promised, but we know that it has fallen very much short of this, which has all along given rise to a great deal of disappointment. Unfortunately they had been unable to confine themselves to the old Meyer and Charlton reef—the developments not being sufficient—and were obliged to fall back upon the ground of the Wolsingham and Wolhuter, which the company acquired some time ago, but which is not so rich as the Meyer and Charlton reef. In spite of this deterioration, however, the Chairman has not abandoned his sanguine hopes, for he feels assured—and most will share his assurance—that the crushings will improve again. In fact, he feels sure it will not be long before his predictions are fulfilled, and that the above profits will be realised "within a few months." This is not mere imaginative prognostication. The Chairman builds his hopes upon solid facts, though it is quite possible, of course, that the present indications may not be permanent or lasting. The fifth and sixth levels are being opened up on the rich shoot, and, furthermore, they have come across some rich ore in other parts of the mine. It is possible, therefore, that with these promising indications they will bring up their crushings to that of the old mill, which averaged 16 dwts.

In other respects, the past year has been eminently satisfactory. The working expenditure has been considerably reduced—4s. in the £—a feature which reflects great credit upon the management. During the year 63,358 tons of ore were mined, 22,029 tons crushed in the old mill in the first half of the year, and 41,329 tons in the new mill. In the battery 28,082 ounces of bullion worth £104,117, an average of 8·9 dwts., or 32s. 10d. per ton. In the cyanide plant 47,914 tons of tailings were handled, yielding 9341 ounces of bullion, worth £27,830, an average of 3·9 dwts. or 11s. 7d. per ton. The entire production was thus 37,423 ounces, worth £131,948, forming with £1289 realised from subsidiary products a grand total of £133,227, an average yield of 11·8 dwts., or 42s. 1d. per ton milled. The working costs amounted to 24s. 9d., or, including depreciation, to 28s. per ton. The entire profits from all sources amounted to £55,387, of which £10,340 was appropriated for depreciation, leaving an available balance of £45,047. A further sum of £11,518 was obtained as premium upon the issue of 1843 reserve shares at £7 5s. per share. The total was dealt with as follows:—Two dividends of 25 per cent; each were paid to the shareholders, absorbing £42,039, the reserve fund was increased by £4204, and the balance carried to the credit of profit and loss. During the year £60,756 has been expended on capital account, principally in the erection of the new battery, and in carrying out the requisite development work. Besides the ordinary depreciation mentioned before, a special depreciation has been written off with respect to the old 50 stamp battery, old shafts and mine developments. Last year's profit and loss balance of £70,483, together with this year's surplus of £10,322, is thus reduced by an appropriation of £52,011 to a credit balance of £28,794. In the list of assets, accordingly, the old mill permanent works and developments stand at merely nominal sums. So far as actual cash funds are concerned, the company has a reserve fund of £15,638, cash assets amounting to £10,970, and a cash liability of £29,985; the excess of cash liabilities over funds in hand is thus nearly £20,000. In consequence of the unexpected fall in the grade of ore, the directors have undertaken the erection of 20 more stamps, with an additional cyanide plant, boilers, &c. The cost of this new plant is not stated, but the discharge of the company's liabilities will not necessitate any further increase of capital. The development of the mine is now much improved, the ore reserves consisting of 175,827 tons of Main reef, 50,416 tons of Main reef leader, and 50,038 tons of South reef, a total of 281,281 tons, and an increase of 22,555 tons over the figures at the end of 1894.

In consequence of the increased expenditure, the company would be somewhat in debt, but the Chairman assured the shareholders that there was no intention of increasing the capital. It is the desire of the board to keep it at £85,000, to pay off their debts from the profits, and to continue paying their ordinary profits. If the anticipations which the directors feel they are justified in forming be correct, the future profits will amount to nearly £100,000 a year; and as the dividends will only absorb something like £45,000, there will be a large margin left from which to liquidate the debts of the company. The Meyer and Charlton has, in one great respect, been more fortunate than most of the Rand companies. It has not suffered much from the scarcity of native labour. Referring to this matter, the manager said:—"I am again pleased to report no difficulty has been experienced in securing a plentiful supply of native labour for all departments, although our requirements have been double that of the preceding year, owing to our increased stamping capacity. These natives have come to us without any inducement or assistance from anyone." It would seem from this last sentence as if the Meyer and Charlton had a charm for or exercised some spell over the native labourers. Whatever the reason, it is a fact to give rise to feelings of gratification, and speaks greatly in favour of the company's prospects. As to the life of the mine, various estimates have been made by different authorities, and most agree in putting it down at between 12 and 14 years. The reefs worked are the Main reef, Main reef leader, and South reef. The two latter supply the better class of ore. The average stoping width of the reefs throughout the mine is as follows:—Main reef, 6½ feet; Leader, 2½ feet; South reef, 4 feet. The reefs dip at a mean angle of about 40°, and the Main shaft, started in front of the Main reef, but behind the leader, at an angle of 42½°, very quickly cut the latter, which had a steeper dip at the outcrop. The Leader, however, again passed through the shaft at about 200 feet, as did the Main reef itself 150 feet later. The shaft is now turned to an angle of 35° in order to follow them, and this angle, it is anticipated, will be maintained right to the boundary. In estimating the prospects of the company, the *South African Mining Journal* argues that taking the thickness of the three reefs as above given, and assuming that in the undeveloped ground they have a dip of between 35° and 45°, the amount of ore—both that already exposed and that remaining to be

developed—is believed to be as follows in the upper block:—Main reef, 490,000 tons; South reef, 330,000 tons; Leader, 240,000 tons; total, 1,060,000 tons. The nine claims of the southern block should, with the same assumption, yield as under:—Main reef, 370,000 tons; South reef, 230,000 tons; Leader, 140,000 tons; total, 740,000 tons. Thus the total accessible ore—the two blocks being separated by but a short distance—should be 1,800,000 tons. It is, however, to be noted that of this amount 860,000 tons is Main reef; and how much of this bulk will be of payable grade it is not yet possible to estimate at all fairly. During the last half of last year, however, the proportion of the total milled was nearly 1:2; and, if this proportion is maintained, it should give about 500,000 tons of Main reef to be included in the total available for crushing. On this hypothesis, the total payable milling ore in the mine would be 1,340,000 tons. The crushing power within a very few few weeks will be 80 stamps, which will account for about 100,000 tons of ore per annum. Thus the life of the mine would appear to be about 13½ years. Again, the profits earned last year, allowing £10,000 for depreciation, amounted to £45,000 for some 60,000 tons crushed. The grade of ore has temporarily fallen off, but it is as unsafe to prognosticate that this condition of things will continue, as it would be to predict a rise above the normal. Thus it appears advisable to regard the past year, during part of which the ore was of good grade, while later it had fallen off to a distinctly lower level, as a normal average. If so, the profit per annum on 100,000 tons crushed should be £62,000; this is after allowance for working costs and depreciation of plant. A return to the former average grade in milling should yield considerably better results.

THE RIO TINTO COMPANY.

THE report which the directors of the Rio Tinto Company will lay before next Thursday's meeting should give general satisfaction, for not only is it one of the best they have issued for some time, but it describes a position of affairs most encouraging and promising. It is safe to say, we think, that so excellent a report was not generally expected, and that, therefore, it has much exceeded anticipations. It is true that the copper market has shown improvement, but not to such an extent as to be solely responsible for the improvement in the company's position, The improved condition of things must, therefore, be due in a great measure to the management, and as the results have been so brilliant, it should induce the shareholders to repose every confidence in the future directorial control. When last summer the proposal was put forward to convert the mortgage debt, it occasioned much disappointment and discouragement, and it shattered the faith of many in the prospects of the company. We were amongst those who regarded the scheme favourably, being assured that it was one likely to greatly benefit the company, and our opinions, we are gratified to learn, have been supported by the results before us.

We learn that the conversion of the debt was most successfully carried through, and already has resulted in a saving to the company of £64,000, During the current year, however, it will rise to £74,000, which is equal to more than 2½ per cent. on the share capital of the company, which, of course, will go to swell the dividends. The operation of the sinking fund will commence on July 1st, 1896, and the whole of the bonds will be paid off within 32 years of that date. It will be open to the directors, however, to exercise the option which is reserved to them of paying off the whole or any increased portion of the bonds at any time after June 30, 1905. The discount and expenses of the new issue amounted to £197,940 1s. 4d., which has been reduced by £50,500, the amount of the First, Second, and Third Five per Cent. mortgage bonds during the past year, before the conversion was carried out and charged to revenue. Another novel feature in the balance-sheet is the appearance for the first time of a reserve fund. This has been created by the apportionment of £75,000 from the revenue account of 1894, and invested in the purchase of Consols, and the directors now propose to add £25,000 to it from the profits of the past year, thus bringing up the amount to £100,000. A sum of £25,000 has also been added to the general depreciation account, whilst the overburden account has been reduced by £10,000. The profit, after providing for all interest and all other expenses, amounts to the very substantial sum of £534,067 12s. 10d. This at once testifies to the remarkable improvement which has taken place, as it shows an increase of no less than £162,086 over the profit for the previous year, though, of course, that was an exceptionally bad one. After writing off various necessary sums there remains the respectable balance of £411,177, which the directors propose to appropriate as follows:—£162,500 for interim dividend of 10s. per share, paid last November; £195,000 towards a final dividend of 12s. per share, which the directors now recommend; and £25,000 to the reserve fund; leaving a balance to be carried forward of £28,677. It will thus be seen that the dividends have made a corresponding leap, and are the highest paid since 1890, when they amounted to 16½ per cent. The above sums work out at 11 per cent. per annum as compared with only 4 per cent. last year, and 7 per cent. the two preceding years. Coming to the statistics of the year's production we find that the total quantity of pyrites extracted was 1,372,376tons, as compared with 1,387,095 tons in 1894; while the average copper content works out at 2·821 per cent., as against 3·027. The quantity invoiced to consumers in England, Germany, &c., was 518,560 tons, against 485,441 tons in 1894 and 469,339 tons in 1893. The copper produced in 1895 by treatment at the mines and the copper in the pyrites shipped amounted to 32,985 tons, as compared with 31,061 tons in 1894 and 32,851 tons in 1893. The quantities of copper brought to market, both refined and in pyrites, came to 31,295 tons, as against 31,061 tons in 1894 and 30,123 tons in 1893. Comparing these figures with last year's production, the increase is not very great, and it will be at once apparent how much the improved price of the metal has had to do with the increased profits. But, as we have already said, that does not solely account for the all-round improvement, for skilful and economical management has worked some wonders.

As regards the future, it is bright with promise. Naturally, it is impossible to predict what will be the course of the copper market, but if that is uncertain, it is not so with the mine. There is enough copper in it, the manager estimates, to last for 97 years, so that no concern need be felt as to the life of the mine. Already, during the 23 years of the company's existence, 23,000,000 tons have been extracted, and the manager estimates the quantity now opened up to be not less than 135,000,000 tons, which, at the present rate of output, 1,400,000 per annum, will last for the period we have mentioned. Of this quantity, it is estimated that 35,000,000 tons consist of ore poor in copper, leaving 100,000,000 tons of a quality not under the average of what has been worked in the past, or (say) 70 years' supply. This does not take into account what may be found in the masses still unexplored, so that the manager's estimate of the company's life may be regarded as a minimum. Thus the wonderful Rio Tinto Mine is likely to remain a wonder within the memory of the youngest. Considering the life of the mine and its prospects, the shares may be regarded as an excellent investment, and not at all beyond their true value.

PARDY'S SYNDICATE.

IN another column we publish a letter from Mr. JAMES R. PARDY, dealing in a specific and categorical manner with certain allegations which were contained in a letter signed JOHN K. LESLIE, published in this paper some weeks since. It is only fair to Mr. PARDY, at the outset, to say that no sooner had the letter appeared than he called at the offices of this paper and contradicted the statements of Mr. LESLIE. As we then intimated, we have no other object to serve than to allow the truth to appear, and if unwittingly we have caused any undue pain or injury, we are sorry for it. Mr. PARDY to-day avails himself of our offer that he should place before the public in these columns a statement of the facts relating to the matters alluded to by Mr. LESLIE. We have read them with care, and commend them to the consideration of our readers. We have no knowledge of Mr. LESLIE. Of Mr. PARDY, we can say that, personally, he prepossesses us. The style and character of his letter, moreover, is satisfactory. There is nothing violent in it; on the contrary, without shirking the points of Mr. LESLIE'S letter, it deals with each in turn. Instead of their being no outcrop or prospecting done on Pardy's Range, Mr. PARDY states in a perfectly precise manner what the outcrop is, and the amount of work that has been done before he left, and he gives the name of the contractor who was continuing the work at the time he left. He proceeds to state specifically what has been done and what has been found at both the Guy Fawkes and Ingamasonga Reefs, and names no less than six gentlemen, including Mr. DANFORD, the Surveyor-General to the Mozambique Company, who have reported upon the property. Mr. PARDY points out that Messrs. JOHNSON and MATTHEY have, moreover, assayed some of the ore at 7 to 8 ounces to the ton. Mr. PARDY, in his statement, invites our readers to verify his statements as to his holdings by an inspection of the register at Somerset House, as an evidence, not only of his belief in his property, but that he has the courage of his opinions and has backed them, as he states in his letter, by increasing his holding. We have much pleasure in publishing this statement, as our only desire is that the public may have every fair opportunity of forming their opinion.

THE SOUTH AFRICAN PROBLEM.

THE serious position of affairs in the Transvaal, precipitated by the action of Dr. JAMESON, has given rise to the production of an endless mass of literature, from the pens of all kinds of writers, who pose themselves as authorities and guides in the solution of this intricate problem. One of these contributions is a small volume, entitled "The Disunited States of South Africa," by Mr. R. W. MURRAY, the second edition of which has just been published by Messrs. KING, SELL, and RAILTON (Limited). Mr. MURRAY does not deal very gently with President KRUGER, at whose door he lays the blame for the present position of affairs, and whose character and policy is the colossal barrier to an amicable and a permanent settlement. Although there will be some who will sympathise with many of the author's expressions, we are afraid that they will offend the good taste of the majority, who will also be afraid that they will do injury to the cause he has at heart. With these exceptions we are pleased with Mr. MURRAY'S book, though we do not think his suggestions for a solution of the difficulty are practical at the present moment, nor are we sanguine that they will be favourably regarded in political circles. He suggests the union of South Africa protected by the British Flag; a Council of State to decide upon questions of general policy; the leaving to the various Colonies and States the regulation of their own affairs; the President of the Council to be the High Commissioner, or whatever he may be termed, as the representative of the Paramount Power; the election of the Governors of self-governing colonies by their legislatures; the bringing of the Crown colonies and the protectorates, and such like, in touch with the general government; the dealing with Portuguese possessions, or an understanding which would not offend the nationality of Portugal, and which would be as beneficial to Portugal as the English occupation of Egypt is to its creditors; and the flag question to remain undisturbed as far as the Republics are concerned. He admits that these proposals are crude; he might also have said that they were too Utopian, but, he adds, "they may be taken as pegs on which arguments may be advanced and some better scheme devised." What we like better is his fruitful contrast between President KRUGER'S policy, and that of the President of the Orange Free State, wherein he ridicules the benefit which the Transvaal Republic would be likely to gain from the conference which, it is said, is to take place between the two Presidents. "How this is to be effected," he remarks, "is not quite clear, unless the Presidents and two States merge into one President and one State. President STEYN will be wise to remember what happened to the Johannesburg tortoise, when President KRUGER tempted it to put out its head far enough. If the generous franchise of the Free State were extended to the Republic, then it is perfectly certain that the Uitlanders in the Republic would like nothing better than Pretoria absorbing Bloemfontein, or Bloemfontein absorbing Pretoria. But there is very little likelihood of either event occurring, for the burghers of the Free State are not altogether in love with Mr. KRUGER, and they have not forgotten such incidents as that of the closing of the drifts. When President STEYN next meets the autocrat of Pretoria, he would do South Africa great service, if he would bring him to President STEYN'S own way of thinking, as we find it so admirably expressed in his own words on the occasion of his being installed into office, with a solemn ceremonial at Bloemfontein, on Wednesday, March 11, 1896. President STEYN'S declaration was that of a true Republican, and the sooner he undertakes the education of Mr. KRUGER, and brings him to a proper conception of what Republicanism should be, the more will it be to the happiness and contentment of the people of the Transvaal in particular, and the inhabitants of South Africa generally." Many will be surprised to hear that the Boer is not naturally unfriendly to the British, a fact which is undoubtedly generally believed. In fact, it is the universal impression that this is a great obstacle to a settlement of the existing differences. He contends that their enmity is but artificial, and is put into their heads; it does not exist in their hearts. Whatever seeming race feeling may exist, he says, is of foreign importation, and there is only to be intercourse between the white races, for anything like race rivalry to disappear. The railways and matrimony will do away with anything of that sort amongst the whites. Thus, he contends that the Boers are, if left alone, perfectly willing to live amicably and peaceably with the Uitlanders. The only individual who is opposed to this, and who is not enlightened enough to foresee the consequences it will entail, is President KRUGER himself. These are Mr. MURRAY'S opinions, but we really think that he is paying too high a compliment to the Boer population. Mr. KRUGER'S best friends, he says, should advise him to retire into private life, but he sarcastically adds, "as it is difficult to know who they are, it is somewhat hopeless to expect any such advice will be given to him, as he regards the State as a personal estate of his own. The laying down of power never occurs to him. The State is his farm, and the people in it are his children, and the great majority of people find that they have an ill-tempered, bad-mannered, and hard-hearted father." Mr. MURRAY is quite as emphatic in the unflinching duty that lies before our legislators. There is one thing positively clear, and it is that Mr. CHAMBERLAIN, having put his hand to the plough, must at all risks, somehow or another, go on with the work which he undertook with such determination, and in such emphatic language. "The honour of England is at stake, and that is the unanimous opinion of the British nation." The grievances of the Uitlanders must be redressed; justice must prevail. In this Mr. MURRAY has anticipated what Mr. CHAMBERLAIN said in his speech delivered last Wednesday evening before the Constitutional Club. This speech was a model of good sense, combined with a statesmanlike prudence and firmness. There is one thing which is absolutely certain, and that is, that we shall at all risks continue to be the paramount power. We shall strive our best to maintain amicable relations with the Dutch, but we shall insist upon the Uitlanders receiving the commonest rights of citizenship. But, of course, we cannot expect things to be righted at once. It is a problem for time alone to solve; therefore, we must be patient. For this we cannot blame President KRUGER. It is the consequence of the unfortunate action of Dr. JAMESON. There is every hope that Mr. CHAMBERLAIN will be successful in his negotiations with President KRUGER. At any rate, if he fails, it will be only because he will have exhausted all resources of persuasion and argument, and if any evil consequences ensue, he will not be held responsible.

NOTES AND COMMENTS.

FINANCIAL prophets are now lifting up their voices in Throgmorton-street to predict for the early future a boom in Westralians. Their theory has some affinity with the idea of volcanic eruption as elaborated by the physicist. There is, they say, a vast store of pent-up energy within the speculative crust which must soon find an outlet, and, proceeding upon the doctrine of the least resistance, the outburst will probably take its exit through the West Australian section. Indeed, according to these philosophers, the impending eruption has already heralded its approach by several premonitory fluctuations, evidencing as much for the activity that must be latent within these particular share circles as for the irregularity which undoubtedly characterises its manifestation. Without taking upon ourselves wholly to support the position we have illustrated, there can be no reason why we should not indicate one or two circumstances which lend to it a considerable show of probability. In the first place, the succession of unfortunate incidents which has given the tone to South African shares during the past few months has undoubtedly acted beneficially to the West Australian department by diverting thither attention and favour which might have been bestowed elsewhere. At recent meetings held in connection with West Australian companies, some of the speakers have been able to institute broad comparisons respecting conditions of government, which are

altogether to the prejudice of South Africa. It is, to some extent, natural that the investor should have a *penchant* for putting money into spheres of enterprise that are not frequently troubled by wars or rumours of wars. Contemporaneously with this diversion of general interest from one section to the other, the reputation of West Australia as a gold-producing centre has been strengthened by a large number of articles appearing in the different City publications, and by several lectures which have been delivered by eminent men on the same subject. So that, with these influences working together, a West Australian boom is not, perhaps, altogether unlikely.

As we have already hinted more than once in our columns, there is as yet no prospect of a speedy settlement to the Transvaal question, nor of a general recommencement of ordinary, unruffled mining progress under the favourable conditions that terminated not so very long ago. The rising that was predicted in so many quarters came indeed; but its issue was altogether unexpected in character. Instead of leading, as was so generally hoped, to a relaxation of the burdensome imposts and regulations that have long weighed heavily upon the industry, and to a redistribution of social and political privilege, the whole question is again relegated to the political cauldron. There, is, however, much to hope from the negotiations at present proceeding between Government and Government—that is, between Colonial Secretary and President. Whether Mr. Kruger will come to England is indeed at least doubtful, and whether, coming, he will not formulate conditions that from our point of view are altogether beyond discussion is much more so. There is, of course, the possibility, and even the probability, that the President has gone on the tactic of a plaintiff in a lawsuit, and has asked a great deal lest he should get nothing. But it is, at least, open to question whether a more candid and straightforward policy would not have served his purpose better, and whether what everybody knows to be the cardinal point in his political creed would not have gained more from open and friendly overture than from a devious essay in diplomatic machiavelianism. In the meanwhile, these constant disturbances to the internal balance of the country's affairs are exerting a very detrimental influence upon the chief industry there, which is reflected not only in the published output returns, but in other ways that are none the less forcible in their meaning because somewhat less easy to read. Despite the wearisome character of a waiting policy, there really seems no other course open to us for the present, and it may be questioned whether the natural flux of the populations will not rectify the existing state of things.

Now that peace and good Government have been restored to the Gold Coast, it may be well to enquire what measures the Government propose to take in order that the richness of the country may not be allowed to lie idle. The mineral and vegetable resources of the territory are known to be great, and the export figures of gold which have already been reached—with the most crude and unadvanced methods of working, and with every possible hindrance in the way of want of communication—are sufficiently great to show that if opened up with the usual amount of energy, and the smallest possible show of engineering ability, another promising country would be added to the list of auriferous producers. Perhaps the Government, now that general attention has been directed to the Coast, may be induced to provide some elementary means of communication between point and point—perhaps to the extent of a light railway—so that the mining industry may be able to proceed in accordance with the latest views of machinery and ways of development. To Europeans desirous of engaging in mining in the country the great bugbear is, undoubtedly, the unfortunate climate which rules inwards from the coast, and which is not only tropical in heat, but aggravated by swamp exhalations and an excessive bush growth, which prevents free circulation. Those who know the country, however, assert that with a proper dietary and a strict observance of ordinary sanitary rules, the country is no more prejudicial as to health than other tropical countries which are far more popular. It is satisfactory to learn that the Government are organising a roads and surveys department, so that one great obstacle to industrial progress is, apparently, in a fair way to be removed.

THAT we are destined to hear more of Victoria—that is, of its gold mining industry—in the near future is becoming more and more recognised, and that it is destined to attract more of English capital than has ever yet flowed there, is also a matter of general belief. Steadily, but most persistently, it is proving to the world that it is abundantly rich in the precious metal, and that it is well worthy of the attentions of the enterprising investor and capitalist. At any rate, it has been more neglected than it deserves to be, as has been demonstratively proved from the frequent articles which have appeared in our columns. The latest news from the colony is that a rich quartz reef has been discovered at Pitfield Plains, between Ballarat and Rokewood, by five brothers named O'Keefe. The party have been prospecting for the last two years, and some time ago they found a small run of alluvial which turned out satisfactorily. While working this, two of the brothers started to trench the hillside in search of quartz, and were rewarded beyond their most sanguine expectations. About 5 feet from the surface they struck a reef thickly charged with gold. Some of the specimens, says the *Australian Mining Standard*, are magnificent, and about 47 lbs. of them are estimated to contain nearly 35 lbs. of gold. The golden ore is running through the stone in veins and nuggets. The find has caused a good deal of excitement in the district. The claim is known as "Tim's Lucky," but it has not yet been ascertained whether there is a defined lode or not. The surrounding country is mountainous, and is reported to abound in quartz formations. The supposed line of the golden reef has already been pegged out for several miles.

OUR contemporary also records some new gold finds in Gippsland, Victoria:—The mining registrar at Jordan, in the Jerico division of the Gippsland mining district, reports a gratifying improvement in mining. He states that a co-operative party which was formed to test a piece of ground about 400 yards above Jerico, after driving a tunnel 171 feet, cut a reef 90 feet below the surface, varying in width from 6 inches to 5 feet, from which a trial crushing of 10 tons gave the satisfactory yield of 35 ounces of retorted gold, or an average of 3 ounces 10 dwts. to the ton. Since then the party have driven about 90 feet on the course of the lode, which continues to show good gold. There are at present seven men engaged at the mine, and the owners have let a contract for the erection of an eight head battery, the contractor for which is now pushing forward with the work. The find caused a number of prospectors to flock to the district, and several discoveries have been made, one of which yielded 22 ounces 10 dwts. to the ton from a trial crushing of 2 tons. A track is badly wanted up the B.B. Creek. Many prospectors had to carry their supplies on their backs, as there was no horse track that was safe. The New Lock Fyne Gold Mining Company have crushed 1560 tons for a yield of 975 ounces, and paid £3000 in dividends. Preparations are being made for the erection of further crushing plant, and about 50 men are employed at the mine. Alluvial mining is in a depressed state. Some 20 or 30 men are at work in the district, but none of them are making wages.

THERE can be no doubt that the industrial and commercial revival which we have now with us somewhat exceeds in its magnitude and continuance everything that was anticipated. The stagnation which afflicted the City about two years ago was no deeper depression from the normal course of business than the present activity has been above the ordinary plane of commercial experience. In all departments of trade and industry a fuller measure of life has begun to throb, but it is in mining itself—and this despite the unfavourable influences in the direction of foreign politics—that the greatest and most beneficial change has taken place. The boom in the gold industry has been almost commensurate in extent with the whole of the known auriferous tracts of the earth's surface. From the Western States, from India, from the Australasian Continent in general, and the West Australian provinces in particular, comes the same report of renewed activity, greater success, and a general reawakening of enterprise. Even retardist Russia has joined in the movement, and promises to produce gold in the not distant future in a manner that will show her capable of even greater things than was ever before believed possible in her regard. The trades allied with the industry are themselves reaping a plentiful advantage from its rejuvenation, and altogether the hum of activity in Throgmorton and Broad-streets has deepened its note. There is, for the present, no sign that a quieter period will soon supervene. On the contrary, the mining boom seems almost to be gathering force. But City men, to do justice to their foresight, are not relying on its permanency, but, on the contrary, making haste to toss the hay while the sun shines.

A SUGGESTION has been mooted amongst the leading representatives of the mining industry of Australia that a memorial should be erected to the first discoverers of gold in that country—a proposal which is likely to meet with sympathy from mining men in all quarters of the globe. Last month a deputation interviewed the Minister of Mines for New South Wales, who replied that he would be pleased to see a memorial of the kind, and would consequently make a recommendation to that effect to the Cabinet. The benefits which the discovery of gold has conferred upon Australia are beyond computation, and it is only fitting that something should be done whereby the colonists should evidence their gratitude. It was as far back as the year 1814 that gold was first discovered, but it was not until some 37 years later that it was found in payable quality and quantity. Since then £400,000,000 worth of the precious metal has been unearthed. The proposal in question has been generally supported by all classes of the community, and many hundreds of private individuals have promised to subscribe.

IT is not at all surprising that a great deal of feeling should have been created by the announcement that the Kent Coal Fields Syndicate has at last got thoroughly into working order. The artistic and commercial instincts in the English people are in this matter brought into more or less violent conflict. From the former standpoint there is, perhaps, something to say against the heartless carbonizing of the "white, dear cliffs of Dover." No one who has observed the rapid and complete disfigurement which is undergone by any particular country that has the fortune to carry coal commercially workable, and who, at the same time, has travelled through Kent on the return journey from the Continent, *via* Calais, will be at all inclined to look forward with eagerness to the transformation process which is likely now to take place in the English Garden. Mr. Ruskin himself would not, however, forget that there are other than aesthetic considerations at issue in this matter, and these must certainly be allowed to carry great weight. The existence of a large and productive coal field near such towns as Canterbury, Ashford, and Croydon means a great deal to a county made up of agricultural districts. New towns will shortly spring up, and a fresh standard of property values will be created, brought into keeping with altered conditions. The fight for the possession of the coal markets in the neighbouring towns may be expected to become even keener, under the stress of an additional and advantageously situated competitor. According to geological theorists the coal beds shortly to be worked are an extension of the Belgian seams, and, if so, the enterprise and inventiveness of the modern mind might exercise itself in attempting a combination of the Channel tunnel scheme, and a submarine colliery.

WITH reference to the Presidential address of Mr. Jos. D. Weeks, of Pittsburg, delivered some time back to the American Institute of Mining Engineers, in which he claimed that the merit of the invention of the Bessemer process of steel making should be given to Mr. Kelly, of the United States—to which claim Sir Henry Bessemer has made a public reply—Mr. Weeks comments as follows upon the matter, in a letter to the writer of the present note:—"Let me say that if any reliance is to be placed in human testimony on oath, Mr. Kelly practised the essential features of the Bessemer process years before Bessemer claims to have discovered it. His claims have been brought to judicial and quasi-judicial tests again and again in this country, and every time Kelly has been victorious. In 1871, Bessemer attempted to secure an extension to his patent for seven years, but it was denied him; and Kelly's patent was extended, on the ground that he was the original inventor, and Bessemer was not.

"WHAT led me to deliver my Presidential address (continues Mr. Weeks) was that I have known these facts, and have written about them for 16 years at least, and it seems to me, as it is never too late to right a wrong, that there should be placed on record in a place accessible to all, and where future years could look for information, a statement of Mr. Kelly's claims. I shall let the results rest on the documents which I shall publish. I wish I thought it were wise to answer Mr. Bessemer in the tone of his reply. It is rather funny, too, to think that a man should claim the fact that certain towns in the United States having been named 'Bessemer' after him as evidence of his merits. I send you these facts that you may see my position and its strength." *The Mining Journal* does not desire to enter into the merits or demerits of the existing controversy, but Mr. Weeks has for very many years been known to the writer of the present note as a gentleman who, like Cæsar's wife, is above suspicion, and if there is one thing more certain about the matter than another, it is that, whether he is right or wrong in his contention, he conscientiously believes it to be correct.

THE MINING MARKET.

FRIDAY EVENING.

A dull week with Chartered, the principal medium of speculation.—Brownhills fluctuating.—Miscellaneous neglected.

WE have again to chronicle a week of supreme dulness in the Mining Market. The Matabele trouble in general and the stoppage of telegraphic communication with Buluwayo in particular have served to kill business in Africans, except in the case of Chartered, which have been the medium of extensive transactions. We are at present in the dark as to the precise character of the dealing which has been in progress. To a large extent it has been professional, but we must wait until the making-up to ascertain its real influence upon the position. Nor has there been much public interest taken in the Westralian or Miscellaneous sections, although specialities have been looked after by interested cliques.

On Saturday markets were lifeless all round, the attendance being small, and the public conspicuous by its absence. In the Street dealing after the closing of the House, a determined attack was made upon Goldfields, which became very flat, and this was the temper in which the market opened on Monday. Jobbers were inclined to lower prices throughout the African list in anticipation of selling by holders, but the actual public sales were on a small scale. There were some exciting movements in Brownhills, which have for the moment become the favourite speculative medium in the Westralian section. This department generally was inclined to firmness. A slightly better tone was reported in Miscellaneous mines. Tuesday saw a revival in Chartered which had a beneficial effect upon other Kaffirs, Goldfields leading the rally. A good tone was maintained in Westralians and Indians were firm. The New Zealand group was slightly easier. On Wednesday Chartered gave way under the influence of the *Times* cable enlarging upon the critical position of Buluwayo and the increased thousands of Matabele engaged in its siege. During the morning the tone had been distinctly firm, but the break after the luncheon hour was reflected in Gold shares, though there was some hardening up again at the close. Hannan's Brownhills were flat again, but, on the other hand, a rising tendency was displayed among Westralians by the Exploring and Finance Group. A spurt in Kapangas gave a special firmness to New Zealanders. On Thursday business was very quiet, the stoppage of the telegraph to Buluwayo, and the rival attractions of Sandown Park having an equal influence in inducing members to advance the approach of the Settlement as an excuse for leaving business to take care of itself. The see-saw in Hannan's Brownhill was on the up stroke, but other Westralians were irregular. Broken Hills were good, as were New Zealanders. Matters have been quieter than ever to-day, and there are very few changes in the quotation list in any department.

South Africans.

The course of the Kaffir Market in the immediate future will depend upon how the speculative account in Chartered works out at the making up to-morrow. Transactions in these shares throughout the week have been on a large scale, to the neglect of almost everything else, and the point to be decided is, whether the selling has been on account of *bona fide* holders, who can deliver the stock, or is merely speculative. In the former event the bears will, of course, make a tremendous effort to get the price lower. Up to the present they have been held in check by the statement that there are large buying orders in the market should the price fall to 3. Apart from mere market considerations operations in Chartered have during the last two or three days partaken largely of the nature of gambling, seeing that the destruction of the telegraph service has put bulls and bears equally in the dark as to what is going on at Buluwayo. One of the bear rumours in circulation during the week which specified the amount of the indemnity President Kruger was about to exact from the Chartered Company should have been set at rest by the official statement that no demand for indemnity had yet been made. It may be pointed out that the fall which has taken place in the shares represents an aggregate capital depreciation more than enough to pay the cost of several expeditions against the Matabele. We are inclined to anticipate the disclosure of an extensive bear account to-morrow, basing our opinion to a considerable extent upon the amount of pessimistic talk that is in the air. The only important movement during the period under notice occurred on Tuesday, when the last price—3⅞—showed a gain of ¼ on the day. The last price to-night is 3⅞, which is just ¼ better than the price of a week ago. Goldfields are unchanged at 12½, after dipping to 11½ on Tuesday. Gains of ½ are shown in Gold Trust at 8, and Goldfields

Deep at 9. Rhodesian interests generally have withstood the tendency to depression and alarm. Rhodesia Exploring are ⅛ better at 5⅞, Willoughby Consols have lost 1/16 at 1⅛, as have Mozambique at 1⅛, Mashonaland Agency at 2⅛ x.d., and Bechuanalands at 1⅛. Business throughout the Land section has been on so small a scale that most trifling changes are too nominal to be reliable. In the Eckstein group the chief moves are in Ferreira and Simmer and Jack, the former of which is down ⅛ at 20 and the latter up the same fraction at 21. Citys at 4⅞, Geldenhuis at 4⅜, and Henry Nourse at 7, are the turn better, whilst Nigels have declined ¼ to 3⅝, and Modders ⅜ to 8¼. The Barnato Stocks show few changes. Buffels have recovered 1/16 to 2⅞ and Barnato Banks are ⅛ up at 1 1/16. Mays at 3 1/16, Langlaagte Royal at 2⅜, Primrose at 5⅞, and Johnny's Investments at 3 1/16 are all the turn easier. The Randfontein Group is a shade easier all round, the shares of the parent concern having shed 1/16 at 3 1/16, whilst Norths are 1/16 down at 1⅜, which is also the price of Langlaagte Block B. Langlaagte Estate are ⅛ lower at 5⅛, whilst Robinson Banks are unchanged at 6¼. A smart recovery from the lower prices touched earlier in the week is shown in East Rands at 6⅞, but the subsidiary St. Angelo is ⅜ down at 4⅝, and Anglo African Explorations are 1/16 to the bad at 4⅜. Rand Mines are ¼ lower at 28¾, but the only other move in the Deep Level group is an improvement of ¼ in Nourse Deep at 4¼. Durban Roodepoorts have declined ⅜ to 5⅞, and Orions have remained a flat market, although the actual loss is only ⅛ at 2 1/16. Losses not exceeding ¼ are shown in Robinsons at 9¼, Sheba at 2 1/16, Van Ryn at 5⅜, Village Main Reef at 6¾, Vogelstruis at 3⅝, Wolhuter at 7¾, and Worcester at 4⅜. Luipaards Vlei have been sold, and mark a loss of 1/16 at 1⅛, whilst Main Reefs have been exceptionally firm and score a gain of ¼ at 1⅝. Transvaal Gold are unchanged at 5⅝. Amongst the small Lydenburg shares Barrett's have put on 1s. at 11s. 6d., whilst Spitzkops are the turn easier at 14s. In Diamond shares Jagers have fallen ¼ at 9⅝, and De Beers 1/16 at 28, after being lower. St. Augustines are 1s. 3d. down at 8s. 3d.

West Australians.

As suggested above the dealings in Hannan's Brownhill have absorbed a good share of the attention of this market. From day to day the price has moved quickly up or down according to the rumour of the moment as to the success or failure of the machinery. In the middle of the week the shares were offered at 5⅞. This morning they were nearly a full point better than this. The last price 6⅞ shows a net gain of ¼. Great Boulders are 1/16 up at 8. Associated at 1 1/16, Hannan's North at 1½, Proprietary at 1 1/16, Star at 1 1/16, Sir John Forrest at ⅞, True Blue at 1 1/16, and Lady Loch at 3⅛, are all the turn down. On the other hand Hannan's Reward have put on ⅛ at 3⅞, and Lake View ¼ at 4⅛. A special feature has been the advance in London and Globe Finance from 2⅛ to the neighbourhood of 3, on the prospects of an amalgamation with the Exploring and Finance Company, the shares of which are slightly harder at 3⅛. Hampton Plains are firm at 4 1/16, whilst W.A. Goldfields are 1/16 easier at 7⅛. Mainland Consols have been 3, but are slightly below the best at the finish. There is very little to chronicle in the way of change in the greater part of the list, but a special feature of strength deserving mention is Golden Crown, the shares of which have been carried up over half a point to ⅞. The Menzies Group has been the medium of some active dealings, Reefs in particular having fluctuated on either side of £1⅛. Hit or Miss, rather a favourite with the small punters in the House, is ⅛ up at 1 1/16, and Wealth of Nations has scored a like fraction at 1⅛, but White Feathers are 1/16 lower at 2 1/16.

Miscellaneous

In the New Zealand Group a good deal of attention has been devoted to Kapangas, which, after spirited dealings, close 2s. 3d. higher at 15s. Hauraki are 6d. down at 15s. 9d., and Kathleens the turn worse at 4s. Waihi are unchanged at 6¼, but Silvertons have lost ⅛ at 3⅜. Although Indians have been a good market more than once during the week, what changes there are in quotations are inclined to the lower level. Mysores have lost 1/16 at 5⅜, and Ooregum Preference ⅛ at 3⅞, whilst the Ordinary remain at 3, and Champion Reefs at 6 1/16. Charters Towers varieties have been very quiet. Day Dawn Blocks are a few pence better at 12s. 6d., on the strength of a fortnight's crushing showing a yield of 1062 ounces. Mill's Day Dawn are a shade easier at 1 1/16. Broken Hills have been bought on Colonial account, and close ⅛ higher at 2⅜; and British have been persistently picked up, closing 4s. 6d. higher at 24s. Waratah have relapsed 1s. to 10s., and Mount Morgans are 1/16 easier at 3⅛. The feature in Copper shares is the advance of ⅜ in Tintos at 19¼. Copiapo are ⅛ higher at 2⅛.

STOCK EXCHANGE SETTLING DAYS.

CONSOLS.

Wednesday, May 6.

MINING MAKING-UP DAYS:

Saturday, April 25 | Monday, May 11

MINING NAME DAYS:

Monday, April 27 | Tuesday, May 12

ACCOUNT DAYS:

Wednesday, April 29 | Thursday, May 14

HOLIDAY: Friday, May, 1

A LECTURE ON NAVAL CONSTRUCTION.—Mr. Thomas Cornish, the well-known mining engineer, delivered a lecture on Tuesday evening, before the Balloon Society, upon "Our War Ships, and Loss of Life at Sea."—Mr. Sebright Green presided.—Mr. Cornish, who has invented a life-saving apparatus, and has recently designed a new type of war ship, contends that the present single-hull war ship is not the best adapted for stability or safety in time of action or general seaworthiness, the ships being, in his opinion, cumbered with so much heavy top weight that they are liable to founder on slight damage. A diagram was exhibited illustrating Mr. Cornish's design, which is that of a double-hulled ship with turtle back, the object being to deflect the shot or shell, and to give steadiness and safety from rolling. The ship is to carry eight guns, two at each side and end, it being proposed to effect the steering by water jets from bow or quarter as required. It is estimated that the vessel can be turned on its own axis within her own length. Machinery and boilers are placed in either hull secure below water line, and worked independently, so that in case of a vessel being rammed on one side it would not affect the safety of the other hull. Mr. Cornish concluded by referring to the general absence of efficient life-saving appliances on board ship, and to the large numbers of lives that were continually lost from this cause. Eventually the following resolution was carried unanimously: "That, in the opinion of this society, it is desirable that some other type of warship should be adopted by the Admiralty in lieu of many of the ships now in use, and that the design submitted by Mr. Cornish of a double hull and turtle-back armour clad ship is deserving the immediate attention of the Admiralty, especially for the purpose of home and coast defences as floating batteries."

COMPANIES AND LEGAL ANNOUNCEMENTS.

*** Advertisements are inserted in this column at the rate of 9d. per line, with a minimum charge of 7s. 6d.

THE LINARES LEAD MINING COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that the HALF-YEARLY GENERAL MEETING of the above Company will be held at the Office of the Company, No. 6, Queen Street Place, in the City of London, on THURSDAY, the 30th instant, at One o'clock p.m.

To receive the Accounts, Balance Sheet, and Reports of the Directors, Auditors, Superintendent, and Mining Agents for the Half-year ending 31st December, 1895.

To elect two Directors in the place of Edward J. St. John, Esq., and Frederick H. Simmonds, Esq., who go out of office by rotation. They are eligible, and offer themselves for re-election,

To appoint two Auditors for the ensuing year. James W. Jepps and Samuel J. Wilde, Esqs., who are eligible, offer themselves for re-election.

And for General Business, as authorised by the Deed of Settlement,

By Order of the Board,
H. SWAFFIELD, Secretary.

Registered Office: 6, Queen Street Place, London, E.C.,
22nd April, 1896.

THE FORTUNA COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that the HALF-YEARLY GENERAL MEETING of the above Company will be held at the Office of the Company, No. 6, Queen Street Place, in the City of London, on THURSDAY, the 30th instant, at Half-past One o'clock p.m.

To receive the Accounts, Balance Sheet, and Reports of the Directors, Auditors, Superintendent, and Mining Agents for the Half-year ending 31st December, 1895.

To elect two Directors in the place of Edward J. St. John, Esq., and Frederick H. Simmonds, Esq., who go out of office by rotation. They are eligible, and offer themselves for re-election.

To appoint two Auditors for the ensuing year. Samuel J. Wilde and Francis S. H. Judd, Esqs., who are eligible, offer themselves for re-election.

And for General Business, as authorised by the Deed of Settlement,

By Order of the Board,
H. SWAFFIELD, Secretary.

Registered Office: 6, Queen Street Place, London, E.C.,
22nd April, 1896.

THE ALAMILLOS COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that the HALF-YEARLY GENERAL MEETING of the above Company will be held at the Office of the Company, No. 6, Queen Street Place, in the City of London, on THURSDAY, the 30th instant, at 1.45 p.m.

To receive the Accounts, Balance Sheet, and Reports of the Directors, Auditors, Superintendent, and Mining Agents for the Half-year ending 31st December, 1895.

To elect a Director in the place of Edward J. St. John, Esq., who goes out of office by rotation. Mr. St. John is eligible, and offers himself for re-election.

To appoint two Auditors for the ensuing year. James W. Jepps and Samuel J. Wilde, Esqs., who are eligible, offer themselves for re-election.

And for General Business, as authorised by the Articles of Association.

By Order of the Board,
H. SWAFFIELD, Secretary.

Registered Office: 6, Queen Street Place, London, E.C.,
22nd April, 1896.

MASON AND BARRY (LIMITED).

(SAN DOMINGOS MINE, PORTUGAL.)

NOTICE IS HEREBY GIVEN, that the FOURTH ANNUAL GENERAL MEETING of the Members of Mason and Barry (Limited) will be held at the Cannon Street Hotel, London, E.C., on MONDAY, the 11th May, at Two o'clock precisely, for the purpose of receiving the Directors' Report for the year 1895; approving the General Balance Sheet at 31st December, 1895; declaring a Dividend for the year 1895; the re-election or appointment of Directors; and the appointment of Auditors.

The Holders of "Share Warrants to Bearer" will be furnished with a Certificate admitting them to the Meeting upon their depositing Share Warrants representing not less than Ten Shares at the Offices of the Company three days before the day of Meeting, together with a notice in writing stating their Names and Addresses.

The Transfer Books of the Company will be CLOSED from Saturday, the 25th April, to Saturday, the 9th May, both days inclusive.

By Order of the Board,
JOHN G. BARRY, F.C.A., Secretary.

87, Cannon Street, London, E.C.,
20th April, 1896.

MASON AND BARRY (LIMITED).

(SAN DOMINGOS MINE, PORTUGAL.)

NOTICE IS HEREBY GIVEN, that an EXTRAORDINARY GENERAL MEETING of the above-named Company will be held at the Terminus Hotel, Cannon Street, in the City of London, on MONDAY, the 11th day of May, 1896, at a quarter past Two o'clock in the afternoon, or so soon thereafter as the business of the Ordinary Annual General Meeting to be held at Two o'clock on the same day shall have been transacted, for the purpose of considering and, if thought fit, passing the Resolution following—that is to say:—

RESOLVED:—

"That the Capital of the Company be reduced from £840,000, divided into 210,000 Shares of £4 each, to £630,000 divided into 210,000 Shares of £3 each, and that such Reduction be effected by returning to the Holders of the Shares that have been issued, and to the parties entitled to have fully-paid shares issued to them, paid up Capital to the extent of One Pound per share, and by reducing the nominal amount of all the Shares from Four Pounds to Three Pounds."

Should the above Resolution be passed by the requisite majority, it will be submitted for confirmation as a Special Resolution to a Second Extraordinary General Meeting, which will be subsequently convened.

The Holders of Share Warrants to Bearer will be furnished with a Certificate admitting them to the Meeting upon their depositing Share Warrants representing not less than Ten Shares at the Office of the Company three days before the day of Meeting, together with a notice in writing stating their Names and Addresses.

By Order of the Board,
JOHN G. BARRY, F.C.A., Secretary.

87, Cannon Street, London, E.C.
Dated this 20th day of April, 1896

THE SOUTH MOUNT LYELL MINING COMPANY (LIMITED).

COPIES of REPORT and PLANS by Mr. JOHN JAMES MUIR, C.E., M.E., on taking charge of the property as Manager, can be obtained on application at the Company's London Agency.

D. J. MACKAY,
London Agent.

138, Leadenhall Street, E.C.,
April 14, 1896.

RIO TINTO COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that the TWENTY-THIRD ORDINARY GENERAL MEETING of the Shareholders will be held at the Cannon Street Hotel, London, E.C., on THURSDAY, the 30th April, 1896, at Two o'clock precisely, for the purpose of receiving the Directors' Report and Statement of Accounts, for the Declaration of a Dividend, and for other purposes.

Holders of Share Warrants to Bearer will receive a Ticket of Admission on depositing their Warrants in accordance with the Articles of Association three days prior to the Meeting, either at the Company's Offices in London, or at the Société Générale, Rue de Provence, 56, Paris, or at the Deutsche National Bank in Bremen.

The Retiring Directors are Major-General Arthur E. A. Ellis and John MacFarlan, Esq., who, being eligible for re-election, offer themselves accordingly.

The Retiring Auditors are Messrs. Turquand, Youngs, and Co., who, being eligible for re-election, offer themselves accordingly.

The Transfer Books will be closed from Saturday, the 25th inst., to Saturday, the 2nd May, both days inclusive.

By Order of the Board,
GEO. N. THOMSON, Secretary.

Offices of the Company: 30, St. Swithin's Lane, London, E.C.,
22nd April, 1896.

THE METAL MARKETS.

LONDON METAL MARKET.

THE METAL MARKET, LONDON, APRIL 24

Copper.

AT the end of last week there was already a stronger tendency apparent, and there were buyers at prices well above those of Friday's close. On Monday this stronger feeling was more marked, and business took place at up to £45 11s. 3d. s.c. and £45 13s. 9d. three months. This improvement was not, however, maintained, the higher values bringing out sellers, who accepted £45 8s. 9d. s.c on Monday and again on Tuesday and down to £44 18s. 9d. cash, and £45 2s. 6d. three months, was done on Wednesday. Yesterday's market was steady at £44 18s. 9d. to £45 1s. 3d. s.c. and £45 2s. 6d. to £45 3s. 9d., three months, and to-day, after business at £45 1s. 3d. to £45 3s. 9d., and £45 8s. 9d. for the respective positions, we closed steady with spot at £45 2s. 6d. to £45 3s. 9d. and forward at £45 7s. 6d. to £45 8s. 9d. There has been rather more enquiry for consumers' copper this week, and the tendency of prices for these sorts at the close is much firmer.

Tin.

Cash straits opened at £59 15s., and eased off, in a dull and uneventful market, to £59 12s. 6d., the same day, £59 10s. on Tuesday, and after a rally to £59 12s. 6d., touching £59 7s. 6d. on Wednesday. Three months' Straits was done during the same period at from £60 3s. 9d. to £60. On Thursday, cash eased off to £59 5s., and three months to £59 17s. 6d., the day closing at half-a-crown better. To-day we had a quiet and steady market, resulting in a nett improvement of 2s. 6d. per ton, and we closed with cash Straits at £59 10s. to £59 12s. 6d., and three months at £60 2s. 6d. to £60 5s. Dutch tin opened at fl 35¾ for Billiton spot, and underwent no alteration until to-day, when it closed easier at fl 35½, with Banca at fl 38.

Pig Iron

The shipments last week from Scotland amounted to about 7300 tons or (say) 700 tons less than for the parallel period of 1895. The opening in Glasgow was at 46s. 1½d. s.c., and the tone was flat with business down to 45s. 11d., which two figures constituted the outside range also during Tuesday, Wednesday, and Thursday. To-day the market took an upward turn, business being done at 46s. 1½d. to 46s. 5½d. s.c., and the market closed firm at 46s. 5d. s.c. and 46s. 7d. a month. Middlesbrough improved to 38s. 0½d. and hematite to 49s. 0½d.

Lead

Continues dull, though steady as to price, the close being steady at £10 17s. 6d. soft foreign, and £11 2s. 6d. English.

Spelter

The firmness which characterised last week's close has increased during the present week, prompt supplies being evidently scarce. The close is at £15 17s. 6d. to £15 18s. 9d. ordinaries, and £16 5s. specials.

Antimony.

There is no new feature, nor any change in the quotation.

Quicksilver

Is lower at £8 15s. firsts and £8 14s. 6d. seconds.

The following are to-night's (April 24) prices of metals:—

	£	s.	d.		£	s.	d.
Copper.							
Tough cake and ingot	48	15	0	.....	49	5	0
Best selected	49	15	0	.....	50	5	0
Electrolytic Copper	50	10	0	.....	51	10	0
Sheets and sheathing	—			.....	56	0	0
Flat bottoms	—			.....	59	0	0
Chili bars							
Good merchantable, spot, & 3 months respectively	45	3	9	.....	45	8	9
Copper tubes, seamless	—			.....	0	0	7¾
Alloys.							
BRASS: Wire	—			.....	0	0	5½
" Tubes (solid drawn)	—			.....	0	0	6½
" Sheets	—			.....	0	0	6
PHOSPHOR BRONZE: Alloys II.	—			.....	78	0	0
" III. or Cog Wheel Brand	—			.....	81	0	0
" VII.	—			.....	83	0	0
" XI.	—			.....	78	0	0
" Vulcan brand A1	—			.....	73	0	0
DURO METAL	—			.....	77	0	0
BULL'S METAL	—			.....	85	0	0
Ferrobronze (Vivian's).							
Ingots per lb.	0	0	8½	.....	—		
Ordinary sheets, plates, bolts and bars	0	0	8½	.....	—		
Screw bolts and nuts	0	0	8¾	.....	—		
Pump rods, plain	0	0	7¾	.....	—		
" finished	0	0	10¼	.....	—		
DELTA METAL: No. 4 (per ton)	—			.....	—		
" Sheets and plates (per lb.)	—			.....	—		
" Bars, round, square, flat (per lb.)	—			.....	—		
" hexagon (per lb.)	—			.....	—		
Tin.							
English, ingots, f.o.b.	63	0	0	.....	63	10	0
" bars	64	0	0	.....	64	10	0
" refined	65	0	0	.....	65	10	0
Straits, spot and 3 months respectively	59	10	0	.....	60	2	6
Australian spot, and three months respectively	60	15	0	.....	61	7	6
Banca " (in Holland)	—			.....	60	7	6
TIN PLATES: Charcoal, best quality per box	0	14	3	.....	0	15	6
" ordinary	0	11	0	.....	0	13	6
" Coke, best quality	0	9	6	.....	0	10	0
" ordinary	0	9	0	.....	0	9	3

These prices of tinplates are f.o.b. at Swansea; at Liverpool 6d. per box more.

Iron.							
Pig, G.M.B., f.o.b., Clyde, spot	—			.....	2	6	5
" Scotch pig, No. 1 Gartsherrie				.....	2	10	6
" " Coltness				.....	3	13	0
" " Clyde				.....	2	10	0
" " Govan				.....	2	7	3
Bars, Welsh, f.o.b. Wales	—			.....	5	5	0
Plates " "	—			.....	6	5	0
Bars, Staffordshire, at works	—			.....	5	5	0
Sheets " "	—			.....	6	10	0
Plates " "	—			.....	6	7	6
Hoops " "	—			.....	6	15	0
Ship plates, Middlesborough	—			.....	5	1	3
STEEL: English spring	—			.....	10	0	0
" " cast	—			.....	42	0	0
" Rails at works, according to section	—			.....	5	0	0
Lead.							
Spanish or soft foreign	—			.....	10	17	6
English pig, common	—			.....	11	2	6
" L.B.	—			.....	11	10	0
" sheet and bar lead	—			.....	12	2	6
" pipe	—			.....	12	12	6
" red	—			.....	14	10	0
" white	—			.....	17	10	0
" patent shot	—			.....	15	0	0
Spelter.							
Silesian ordinary brands	15	17	6	.....	15	18	9
" special brands	—			.....	16	5	0
English Swansea	—			.....	16	15	0
Sheet Zinc	18	10	0	.....	19	0	0
Antimony.							
Antimony	—			.....	30	0	0
Quicksilver.							
Flasks, 75 lbs. warrants	8	14	6	.....	8	15	0
Manganese. per unit.							
Ore, c.i.f., U.K. ports							
1st quality, 50 per cent. and upwards	0	0	11	.....	0	1	1
2nd " 47 per cent. to 50 per cent.	0	0	10	.....	0	1	0
3rd " 40 " 47 per cent.	0	0	9	.....	0	0	11
Aluminium.							
98–99½ per cent. (guaranteed 98 per cent. min.) in ingots (1 cwt. lots)	Per lb.			.....	Per lb. 0	1	6
do do (1 ton lots)	—			.....	0	1	4½
Nickel.							
98–99 per cent. guarantee	0	1	3	.....	0	1	6

"THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—*Ay*, Antimony; *A*, Arsenic; *Bl*, Blende; *Bx*, Borax; *C*, Copper; *D*, Diamond; *G*, Gold; *I*, Iron; *L*, Lead; *M*, Mundic; *N*, Nitrates; *P*, Phosphates; *Q*, Quicksilver; *R*, Ruby; *S*, Silver; *S-l*, Silver-lead; *Sul*, Sulphur; *T*, Tin; and *Z*, Zinc. * in the "Amount of Share" column of British Mines signifies that the mine is conducted on "Cost Book" principles; ‡ in the "Head Office" column of African Mines signifies that the address given is not that of the head office, but of a sub, or transfer office; and †, following the names of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

** The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

AFRICAN MINES.

Name.	Closing Price, Apr.24, 1896	Closing Price Apr 17, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£		£ s. d.			
Abbott's Con. Reefs	6/ 7/	6/ 7/	1 0	—	1 0 0	—	De Kaap	Broad Street Avenue
Aidler Consolidatd	1 1/16 1 3/16	1 1⅛	1 0	—	1 0 0	250,000	—	1, Moorgate place.
African Estates......	2 2⅛	2 1/16 2 3/16	1 0	2/& rtsOc.16 95	1 0 0	438,600	,,	5, Copthall-buildings
,, Gold Recvry.	1⅛ 1¼	1⅛ 1¼	1 0	rts Oct 30 '95	1 0 0	175,000	—	23, College Hill,
Africana	9/16 11/16	9/16 ⅝	1 0	—	1 0 0	1,075,000	—	34, Clement's lane
Afrikander	1 5/16 1 7/16	1 5/16 1 7/16	1 0	rts May 24 '95	1 0 0	40,000	Transvaal.	13, College Hill
Alexandra Estate *G*	11/16 13/16	11/16 13/16	1 0	—	1 0 0	225,000	Rand	16, George street
Anglo-French Exp.	4 13/16 4 15/16	5 5⅛	5 0	15% Aug 29 '95	5 0 0	30,300	S. Africa	3, Princes street
,, Matabeleland	2 2⅛	2 2⅛	1 0	—	1 0 0	39,750	Matabld.	Winchester House.
Appantoo ...... *G*	—	—	1 0	—	1 0 0	77,885	West Cost	Dashwood House.
Aurora ....*G*	1⅛ 1½	1⅛ 1⅜	1 0	5% Mar,'93	1 0 0	65,000	Rand	8, Old Jewry.‡
,, West United	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	100,000	,,	7, Lothbury
Austral-African ...	15/16 1 1/16	15/16 1 1/16	1 0	3/-Dec. 16 '95	1 0 0	250,000	—	Token.Ho., OpthilAv
Balkis Eersteling *G*	2/9 3/3	2/9 3/3	10/	—	0 10 0	520,000	Transvaal	85, Gracechurch-st,
,, Land	5/6 6/-	5/6 6/	10/	1/ Feb. 13, '96	0 0 0	520,000	,,	,,
Bantjes Consol ...*G*	3 13/16 4 1/16	3⅞ 4	1 0	rts Sep 24 '95	1 0 0	83,0.0	—	15, Geo. st., Mn Ho.
Barnato Bank	1⅝ 1⅞	1 11/16 1 13/16	1 0	—	1 0 0	2,525,000	—	7, Lothbury
,, Consol ...	2 13/16 2 15/16	2⅞ 3	1 0	—	1 0 0	1,000,000	—	,,
Barrett ....*G*	11/3 11/9	10/6 11/	10/	—	0 9 0	207,496	De Kaap	17, Basinghall-street
Bechuanaland Exp.	1 1/16 1 3/16	1⅛ 1⅜	1 0	rts Jy 24 '95	1 0 0	400,000	Bechuana.	19, St.Swithin's-lane
,, Trad g Assoc.	1⅛ 1⅛	1¼ 1⅛	1 0	5 pc Jan 16, 96	1 0 0	100,000	,,	72, Basinghall street
Ben Trovato	⅛ ¾	⅛ ⅜	—	—	— 0	—	—	2, Austin Friars.
Big Golden Quarry	/6 1/	/6 1/	5/-	—	0 5 0	483,226	Kaap Rivr	Warnford Court,
Block "B" Lang.	1 11/16 1 13/16	1 11/16 1 13/16	1 0	—	1 0 0	535,000	Rand	8, Princes-st , E.C.‡
Bonanza	2¾ 2⅞	2¾ 2⅞	1 0	—	1 0 0	200,000	Turffont'n	120, Bishopsgate-st.
Brit. S. A. Char. ...	3 1/16 3 3/16	3⅛ 3⅛	1 0	rts Jy 26 '95	1 0 0	1,999,750	S. Africa	15, St. Swithin's-lane
Buffelsdoorn...... *G*	2 13/16 2 15/16	2⅛ 2⅜	1	16/-Nv. 28 '95	1 0 0	250,000	Potchefstr	7, Lothbury.
,, Central	⅛ ⅜	⅛ ⅜	1 0	—	1 0 0	—	—	8, Old Jewry
,, Consolidated	⅜ ⅜	⅜ ⅜	1 0	—	1 0 0	225,000	—	Warnford Court
Cape Asbestos	¾ 1	¾ 1	1 0	—	1 0 0	50,311	Orange Rv	13, St. Swithin's-lane
,, Copper ...... *C*	2 5/16 2 7/16	2 5/16 2 7/16	2 0	2/6 Dec.16, '95	2 0 0	300,000	Cape Col.	9, Queen-street-place,
,, 6% Pref. ...	2⅜ 2⅝	2⅜ 2⅝	2 0	2/6 Dec.16, '95	2 0 0	45,000	,,	,, ,,
Cassel Coal......	1 11/16 1 13/16	1¾ 1⅞	1 0	7½pcMar27'96	1 0 0	75,000	Johanbrg.	99, Cannon-street.
Cen. de Kaap	1/3 1/9	1/3 1/9	5/-	—	0 2 6	—	De Kaap	Palmerston Bldgs
,, Roodp't Deep	2 2⅛	2 2⅛	1 0	—	1 0 0	220,000	—	120, Bishopsgate st.
Champ d'Or...... *G*	1⅞ 2⅛	1⅞ 2⅛	1 0	3/2 Feb. 27 '96	1 0 0	116,016	Rand	8, Old Jewry, E.C.
Charterland G.F ...	11/16 ¾	11/16 13/16	1 0	—	1 0 0	150,000	—	19, S. Swithin's lane
Chimes West	1¼ 1⅜	1⅛ 1⅜	1 0	—	1 0 0	150,000	—	Winchester Ho.
City and Sub.Nw*G*	4⅛ 4¼	4⅜ 4⅜	4 0	10/-June'95	4 0 0	340,000	Rand	Gresham Ho.
Con. Bultfontein *D*	33/6 34/6	33/ 34/	1 0	9d,Jan. 16 '96	1 0 0	721,500	Griqualand	62, Lombard-st
Con. Deep Levels*G*	5¼ 5¾	5¼ 5¾	1 0	4/- Jy 11 '95	1 0 0	187,250	Transvaal	30, St. Swithin's-lane
Con. G. Fields S A.	12 12¼	12 12¾	1 0	20/ Nov. 14 '95	1 0 0	1,250,000	S. Africa	8, Old Jewry.
Do. 6% Pref.	25/6 26/-	25/3 25/9	1 0	7 1-5d Dc30'95	1 0 0	1,242,999	,,	,,
Do. 5½% Deben...	108⅛ 109¼	109 110	5 0	5¼ Jan. 2 '96	5 0 0	600,000	,,	,,
Crown Deep ......*G*	10⅝ 11⅛	10¼ 10¾	1 0	—	1 0 0	250,000	Rand	120, Bishopsgate-st.
,, Reef ......*G*	11¾ 12	11⅜ 11⅞	1 0	10/-Jan. 18 '96	1 0 0	120,000	,,	,,
DeBeers Consol. *D*	27⅞ 28⅛	28 28¼	5 0	15/- Jan.16 '96	5 0 0	789,791	Kimberl'y	62, Lombard-street.
Do. 5% 1st Deb....	108⅝ 109¼	108⅛ 109⅝	—	5% Jan. 2 '96	—	£3,500000	,,	,,
Do. 5½% Bul. Ob.	102 104	102 104	—	5½% Oct, '95	—	720,000	,,	,,
Doornkop	4/6 5/6	4/6 5/6	1 0	—	1 0 0	250,000	Doornkop	Warnford Court
Driefontein	2½ 2¾	2½ 2¾	1 0	—	1 0 0	175,000	—	Winchester Ho,
Durban Roodept. *G*	5⅞ 6	6⅛ 6¾	1 0	3/- Dec, 16 '95	1 0 0	£125,000	Rand	28, Leadenhall-bldgs
,, Deep......	3⅜ 3⅞	3¾ 4	—	—	—	—	—	
Eastleigh ......*G*	1 1⅛	⅞ 1	1 0	—	1 0 0	240,000	Klerksdrp	52, Leadenhall Street
East Orion......	3/16 5/16	¼ ⅜	1 0	—	1 0 0	275,000	Rand	8, Old Jewry.
,, Rand...... *G*	6 13/16 6 15/16	6¾ 6⅞	1 0	—	1 0 0	570,000	,,	170, Winchester-ho.
Evelyn ......*G*	1 1⅛	1 1⅛	1 0	10% Jan. '89	1 0 0	66,000	,,	28, Old Jewry, E.C.
Exploration	3⅜ 3½	3⅜ 3⅜	1 0	5/- Mar. 12 '96	1 0 0	148,000	S. Africa	30, S. Swithin's-ln.‡
Exploring L & M...	1 5/16 1 5/16	1 5/16 1 7/16	1 0	2/ Dec. 16, '95	1 0 0	216,215	,,	19, ,,
Ferreira ......*G*	19¾ 20¼	20¼ 20¾	1 0	13/ Mar. 12 '96	1 0 0	45,000	Rand	120, Bishopsgt st. Wn‡
French Rand	2⅛ 2¾	2 2⅛	1 0	—	1 0 0	480,000	Rand......	28, Austin Friars.
Geldenhuis Deep*G*	6 6½	6¼ 6¾	1 0	—	1 0 0	265,000	Transvaal .	30, St. Swithin's-lane.
Geldenhuis Est. *G*	4¼ 4¼	4⅛ 4⅜	1 0	6/- Jy 26 '95	1 0 0	187,500	Rand	120, Bishopsgt st. Wn‡
,, Main Reef	1 1/16 1 3/16	1 1/16 1 3/16	1 0	2/ Feb, 13 96	1 0 0	150,000	,,	Warnford Court, E.C
George Goch ...*G*	2 5/16 2 7/16	2⅜ 2⅛	1 0	—	1 0 0	100,000	,,	Johannesburg.
Ginsberg New ...*G*	1 7/16 1 9/16	1 9/16 1 11/16	1 0	—	1 0 0	130,000	Drietfon .	Warnford Court, E.C‡
Glencairn ......*G*	3 7/16 3 9/16	3⅜ 3⅝	1 0	2/6 Feb. 13 '96	1 0 0	200,000	Rand	2, Drapers-gardens.
Gld. Fls. Deep...*G*	8⅞ 9⅛	8¾ 9	1 0	—	1 0 0	600,000	S. Africa	8, Old Jewry.
G.F. of Lydenb'rg	2¾ 3	2¾ 3	1 0	—	—	—	Lydenb'rg	7, Lothbury.
G. F. of Mashonld.	5/16 7/16	5/16 7/16	1 0	—	1 0 0	200,000	Mashonld.	19, St. Swithin's-ln.
G.F. of T.de Fuego	4/3 4/9	4/- 4/6	—	—	—	—		
Graskop ......*G*	4/9 5/3	5/3 5/9	5/-	1½% Mar. '92.	0 5 0	400,000	Lydenburg	2, Tokenhouse Bldgs
Gt. Estrn. Colliery	1 1¼	1 1¼	1 0	—	1 0 0	376,666	Grootolei	8, Finch Lane
Griqualand W....*D*	8⅜ 8⅝	8⅜ 8⅝	10 0	4/ Jan 16, '96	10 0 0	105,700	Transvaal .	62, Lombard-street
Heidelbg. Est. Ex.	15/16 1 1/16	15/16 1 1/16	1 0	—	—	—	Heildelbg .	
Henderson's Trans	2⅛ 2¼	2⅛ 2¼	1 0	—	1 0 0	250,000	Zoutpanbg	85, Gracechurch st.
Henry Nourse ...*G*	6⅞ 7⅛	6¾ 7	1 0	—	1 0 0	100,000	De Kaap ...	Warnford-court.
Hetty	⅜ ¾	⅝ ¾	1 0	—	1 0 0	110,000	Middlevel.	55, Bishopsgate st Wn
Joe's Reef ......*G*	3/16 5/16	3/16 5/16	1 0	—	1 0 0	57,404	,,	21, Mincing Lane.
Johannesbrg Invst	3⅜ 3½	3 7/16 3 9/16	1 0	20% Oct. '95	1 0 0	650,000	—	7, Lothbury.
,, Pioneer	10¼ 10¾	10¼ 10¾	1 0	12½% Nov.,'93	1 0 0	21,000	Rand......	Johannesburg.
Jubilee ......*G*	9 9½	9 9⅛	1 0	6/ Nov. 28 '95	1 0 0	30,000	,,	8, Old Jewry.†
Jumpers ......*G*	6⅞ 7⅛	6⅞ 7⅛	1 0	6/- Mar. 27 '96	1 0 0	100,000	,,	120, Bishopsgt st, Wn‡
,, Deep......	3¼ 3½	3¼ 3½	1 0	—	1 0 0	300,000	,,	30, S. Swithin's lane.
Kimberley ......*D*	¼ ⅛ pm	¼ ⅛ pm	1 0	2/ Jan 16, '96	0 10 0	98,672	Kimberley	19, Finsbury circus.
,, Rdpt....	2¼ 2¾	2 2⅛	1 0	—	1 0 0	125,000	,,	2, Drapers-gardens.
Klerksdorp	15/- 16/6	14/6 15/	10/-	—	0 9 0	400,000	Klerksdorp	110, Cannon St.
Knight's Deep	2⅛ 2¾	2¼ 2⅛	1 0	—	1 0 0	295,194	Rand......	8, Old Jewry
Koffyfontein......*D*	1 1/16 1⅛	1 1⅛	1 0	—	1 0 0	125,000	Jacobsdaal	6, Gt. St. Helen's.
Lancaster	1 13/16 1 15/16	1¾ 1⅞	1 0	—	1 0 0	226,500	Luip. Vlei	120, Bishopsgt st. Wn
Langlaagte Est. *G*	5⅛ 5¾	5⅝ 5⅞	1 0	5/ Feb 13 '96	1 0 0	470,000	Rand......	59, Holborn Viaduct
,, Royal	2 5/16 2 7/16	2 7/16 2 9/16	1 0	rts. Mar. 6 '96	1 0 0	100,000	,,	2, Drapers-gardens.
,, Star...	1⅞ 2⅛	1⅞ 2⅛	1 0	—	1 0 0	170,000	,,	
Lisbon-Berlyn ... *G*	6/- 6/6	6/6 7/	2/6	—	0 2 6	283,233	Lydenburg	Suffolk House,
Lon.Paris Fin & M.	1⅛ 1¼	1 3/16 1 5/16	1 0	—	1 0 0	500,000	—	53, Old Broad Street.
London & S. A. Ex.	14 14⅛	14 14⅛	10/	4/- Mar. 12 '96	0 10 0	100,000	S. Africa ...	19, Finsbury-circus.
Luipaards Vlei Est.	1⅜ 1⅝	1⅞ 2	1 0	6% Mar. '90	1 0 0	319,003	Rand......	Warnford-court.†
Lydenburg Estate.	1 5/16 1 7/16	1¼ 1⅜	1 0	—	1 0 0	190,000	Lydenburg	85, Gracech. Street
,, Ld & Expl	⅛ ⅜	¼ ⅜	1 0	—	1 0 0	200,000	,,	120, Bishopsgte St.
,, M'g. Est.	4¼ 5	4⅞ 5⅛	1 0	—	1 0 0	300,000	,,	,,
Main Reef (New)*G*	1 5/16 1 1/16	1 1/16 1 3/16	1 0	—	1 0 0	111,500	Rand......	15, George St., MnH
Malmani Gold Syn	3/6 4/6	3/6 4/6	2/6	—	0 2 6	200,000	Transvaal	Throgmorton House,
Marie Louise......	2⅞ 3⅛	2⅞ 3⅛	1 0	—	1 0 0	60,000	Rand......	15, George St , Mn H
Marievale Nigel ...	1 1¼	⅞ 1⅛	1 0	—	1 0 0	250,000	,,	,,
Mashon. Agency...	2 1/16 2 3/16 xd	2 3/16 2 5/16	1 0	2/ Ap. 16 '96	1 0 0	100,000	Mashonald	8, Old Jewry, E.C.
,, Central...	⅞ 1	⅞ 1	1 0	—	1 0 0	160,000	,,	,,
Matabelel'd G. R'f	3⅜ 3⅝	3⅜ 3⅝	1 0	—	1 0 0	110,000	Matabelel'd	3, Copthall-buildings.
May Con. (New) *G*	3 3⅛	3 1/16 3 3/16	1 0	2/- Mar. 12 96	1 0 0	236,500	Rand......	4, Lothbury.‡
Meyer & Charl....*G*	5⅝ 5⅞	5⅝ 5⅞	1 0	5/ Feb. 13 96	1 0 0	75,020	,,	1, Crosby Square.‡
Minerva	1⅜ 1⅝	1 7/16 1 9/16	1 0	—	1 0 0	150,000	,,	Winchester House.
Mines Selection ...	⅞ 1	⅞ 1⅛	1 0	—	1 0 0	100,000	—	33. Br'd St. Avenue.
Modderfontein . *G*	8 8¼	8⅝ 8⅞	1 0	—	1 0 0	200,000	Rand......	13, George Street
,, "B" Extensn.	1 9/16 2 7/16	2 5/16 2 7/16	—	—	—	—	—	28, Austin Frias
Molyneux Consoli.	1 5/16 1 7/16	1 5/16 1 7/16	1 0	—	1 0 0	220,000	Modderftn	120, Bishopsgate st
Moodies ......*G*	13/16 15/16	⅞ 1	1 0	-/4 May '90	1 0 0	240,000	,,	Gresham House.‡
Mozambique......	1 7/16 1 9/16	1½ 1⅝	1 0	—	1 0 0	400,000	S.E. Africa	13, Austin Friars.
Namaqua ......*C*	1¼ 1⅛	1¼ 1⅛	2 0	2/6 July '91	2 0 0	94,351	Namaqualand	34, Leadenhall-bldgs.
New African	3¾ 4	3⅞ 4⅛	1 0	20/ Dec. 30 '95	1 0 0	190,000	—	83, Hatton Garden.
,, Chimes...... *G*	1¾ 1⅞	1 11/16 1 13/16	1 0	1/- Mar.27 '96	1 0 0	100,000	Rand......	8, Old Jewry, E.C
,, Comet	2¾ 3	2⅞ 3	1 0	—	1 0 0	175,000	Heidelburg	Winchester-house.
,, Crœsus...... *G*	1⅝ 1¾	1 11/16 1 13/16	1 0	rts Apr 17 '95	1 0 0	255,000	Langlaagte	120, Bishopsgt.st. Wn
,, Gordon......*D*	6/6 6/6	6/6 7/6	1 0	5% Dec. '89	1 0 0	404,344	Griqualand	110, Cannon-street.
,, Heriot ......*G*	9⅛ 9¾	9⅛ 9¾	1 0	5/ Feb. 13, '96	1 0 0	88,750	Rand......	96, Gresham Ho EC
,, Jagersf. ...*D*	9¼ 9¾ xd	9¾ 10 xd	5 0	10/ Apr. 15 '96	5 0 0	200,000	Transvaal .	5, Copthall-buildings
,, Kleinfontein *G*	3¾ 4	3¾ 4	1 0	12½pc Mar,'95	1 0 0	82,500	Rand......	Winchester House
,, Midas	3¾ 4	3 15/16 4 1/16	1 0	rts.Jan. 16,'96	1 0 0	150,000	Mid'le Vlei	120, Bishopsgt-st, W
,, Primrose ...*G*	5¾ 6	5⅞ 6	1 0	5/ Feb. 13, '96	1 0 0	278,750	Rand......	2, Draper's-gardens.
,, Rietfontein *G*	4 4¼	4 4¼	1 0	—	1 0 0	160,000	,,	Warnford-ct., E.C.
,, S.Augustine *D*	8/ 8/6	9/3 9/9	1 0	—	0 19 6	299,137	Griqu'ld W	30-1, St. Swithin's-l,
,, Spes Bona...*G*	1⅛ 1⅜	1 7/16 1 9/16	1 0	—	1 0 0	113,701	Rand......	24, N. John-st., L'pl
,, Steyn Estate‡	1⅜ 1⅝	1 7/16 1 9/16	1 0	—	1 0 0	125,000	Heidelber	19, Bury Street, E.C

AFRICAN MINES—(*Continued*).

Name.	Closing Price, Apr.24, 1896	Closing Price, Apr. 17, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£					
Nigel ...... *G*	3⅛ 3⅜	3¾ 4	1 0	rts Aug 10 '95	1 0 0	160,000	Rand......	96, Gresham Ho., EC
,, Deep ......*G*	1¾ 1⅞	1¾ 2	1 0	—	1 0 0	195,000	Heidelberg	8 Old Jewry.
North Randfontein	1⅝ 1⅞	1⅞ 2	1 0	—	1 0 0	235,000	—	8, Princes street
Nourse Deep......	4 4¼	3¾ 4¼	1 0	—	1 0 0	375,000	Rand......	120, Bishopgt.-st., Wn
Oceana	1 11/16 1 13/16	1⅝ 1¾	1 0	2/-Nov. 28 '95	1 0 0	357,430	Wtrbg Lyn	13, Austin Friars.
,, Develpmnt	⅝ ¾	9/16 11/16	1 0	—	1 0 0	50,000	Heidebrg.	,,
,, Minerals ...	13/16 15/16	13/16 15/16	1 0	—	1 0 0	5.0,000	,,	,,
Orange F.S.E. ...*D*	3⅛ 4	3⅛ 4	1 0	10% Aug., 95	1 0 0	284,000	OrangeF.S.	10, Moorgate-street,
Orion (New)......*G*	2 2⅛	2⅛ 2¼	1 0	10% Aug. '95	1 0 0	30,000	Rand......	8, Old Jewry.
Paarl Central ... *G*	1 1/16 1 3/16	13/16 15/16	1 0	—	1 0 0	138,750	Transvaal .	120, Bishopsgt st. Wn
Pardy's Mozambq.	1⅛ 1⅜	1⅛ 1⅜	10/	rts Mar 12 '96	0 10 0	60,000	S.E. Africa	Broad St. Avenue.
Piggs Peak ...... *G*	⅜ ½	⅜ ½	1 0	—	0 17 0	200,000	Swazielnd.	6, Queen-street-place
Porges Randfontn.	1⅛ 1¼	1⅞ 2	1 0	2/ Feb. 13 '96	1 0 0	457,500	Rand......	1, Bank Buildings
Potchefstroom... *G*	⅜ ¾	11/16 13/16	1 0	—	1 0 0	389,750	Potchefstm	19, Bury-st., E.C.
Princess Estate *G*	2⅞ 3	2 15/16 2 1/16	1 0	—	1 0 0	125,000	Rand......	33, Cornhill, E.C.
Rand Central Ore	2¼ 2⅛	2¼ 2⅛	1 0	25 p c Aug. 95	1 0 0	115,000	—	8, Princes-street, E.C.
Randfontein ......*G*	3 2⅛	2 1/16 2 3/16	1 0	—	1 0 0	2,000,000	Rand......	1, Bank Buildings
Rand Mines ...... *G*	28½ 29	38¾ 39¼	1 0	—	1 0 0	332,798	,,	120, Bishopsgt st. Wn‡
Rand-Rhodesia Ex	⅞ 1	15/16 1 1/16	1 0	10 p.c. Oct, '95	1 0 0	25,000	R&Rhodesa	123, ,,
Rhodesia Ex & Dv.	5⅛ 6	5⅛ 5⅜	1 0	—	1 0 0	50,000	Mt &Mash'l	8, Old Jewry.
Robinson(SA)Bank	6¼ 6⅜xd	5⅛ 6⅛ xd	4 0	4/ Apl. 15, 96	4 0 0	750,000	—	8, Prince's-street
,, Deep......	7 8	7⅜ 7⅜	1 0	—	1 0 0	500,000	M'nR'r'R'nd	120, Bishopsgate st.
,, Diamond	1⅛ 1¼	1⅛ 1¼	1 0	—	1 0 0	350,000	Kaal Valley	8. Prince's street
,, Gold......	9⅜ 9⅜	9⅜ 9⅜	5 0	8/ Feb 13 '96	5 0 0	550,000	M. Rf.'rand	28, Austin Friars, EC
,, Randftn.	1⅜ 1⅛	1 9/16 1 11/16	1 0	—	1 0 0	517,000	Rand......	8, Prince's-street.
Roodepoort Deep	2⅞ 3	2 13/16 2 15/16	1 0	—	1 0 0	170,000	,,	8, Old Jewry, E.C.
Roodepoort Un. *G*	5⅝ 5⅜	5⅛ 5⅜	1 0	5/ Feb 13 '96	1 0 0	130,000	,,	Warnford-court.‡
Rose Deep......	4¾ 5¼	5¼ 5⅜	1 0	—	1 0 0	300,000	M. Rf.'rand	30-31, S.Swith's. lane
Rothery Block......	8/ 10/	8/ 10/	1 0	—	—	—	—	55, Bishopsgate st.
St. Angelo	4⅛ 4¾	4⅞ 5⅛	1 0	—	1 0 0	175,000	—	Winchester House.
St. Helen's Devel.	2⅜ 2⅜	2⅜ 2⅜	1 0	—	1 0 0	47,950	S. Africa ...	13, S. Helen's Place.
Salisbury New ...	4⅛ 4⅜	4⅛ 4⅜	1 0	—	1 0 0	98,000	Rand......	96, Gresham Ho., EC
Sheba ......*G*	2 2⅛xd	2⅛ 2¼ xd	1 0	1/- Apr. 15 '96	1 0 0	850,000	Lydenburg	18, S. Helen's place.
Simmer & Jack...*G*	5 6	5 6	1 0	2/ Aug 14 95	1 0 0	250,000	Rand......	8, Old Jewry.
S.A Gold Trust New	7⅞ 8⅛	7¾ 8	1 0	15/ Feb 27 '96	1 0 0	250,000	S. Africa ...	,,
South West Rand	⅜ ½	⅜ ½	1 0	—	1 0 0	158,000	Rand......	Winchester House.
Spitzkop (New) *G*	13/9 14/3	15/ 15/	1 0	—	1 0 0	99,070	Lydenburg	15, Bishopsgt-st, Wn
Stanhope ......*G*	15/16 1 1/16	1 1/16 1 3/16	1 0	2/- Oct 20 '95	1 0 0	34,000	Rand...	96, Gresham Ho., EC
Sutherland R. ...*G*	5/ 6/	5/ 6/	1 0	—	1 0 0	220,000	Zoutpan'bg	Dashwood Ho.
Tati Concessions ...	2 3/16 2 5/16	2 1/16 2 3/16	1 0	rts Jy. 22 '95	1 0 0	392,000	—	Gresham House.
Trans. Coal Trust...	1⅛ 1⅞	1¾ 1⅞	1 0	1/- Apr. 96	1 0 0	439,965	Rand...	Broad-st, House, EC
,, Consolidatd	1¾ 2	1⅞ 2⅛	1 0	—	1 0 0	485,131	Transvaal	120, Bishopsgte st Wn.
,, Est. & Dev.	15/16 1 1/16	⅞ 1	1 0	—	1 0 0	428,600	,,	10, New Broad-st. EC
,, Gen. Assoc.	2⅛ 2⅜	2⅛ 2⅜	1 0	10/-Mar,12 '96	1 0 0	185,000	—	30, S. Swithn's lane.
,, Gold Exp.*G*	5⅜ 5⅜	5⅛ 5⅜	1 0	3/6Jan.16 '96	1 0 0	260,000	Transvaal .	Suffolk House, EC.
,, Gold Fields	3⅛ 3⅛xd	3⅛ 3⅜xd	1 0	3/- Apr. 15 '96	1 0 0	135,000	S. A. R.	120, Bishopsgt.-st. Wn
,, Land... ...	1/16 3/16	⅜ ⅜	1 0	—	1 0 0	79,915	Transvaal .	75, Abchurch Lane.
Treasury ......*G*	3 3¼	3¼ 3½	1 0	12½% Sep.'94	1 0 0	135,000	Rand......	Warnford Court.
United Exploratn.	⅞ 1⅜	⅞ 1⅜	1 0	—	1 0 0	250,000	—	120, Bishopsgte St.
Un. Ivy Reef......*G*	⅞ 1	⅞ 1	1 0	2½ Jan. '94	1 0 0	45,000	Transvaal .	110, Cannon-street,
U. Langlaagte(N)*G*	1⅜ 1⅜	1⅜ 1⅜	1 0	—	1 0 0	146 000	Rand......	85, Gresham Ho., EC
,, Pioneer......	¾ 1	¾ 1	1 0	—	1 0 0	75,000	De Kaap ...	16, S.Helen's-pl., EC
,, Rhodsa.G F	11/16 13/16	⅝ ⅞	1 0	—	0 10 0	225,500	Rhodesia...	13, George street, EC
Van Ryn ...... *G*	5¼ 5⅛	5⅜ 5⅝	1 0	4/- Jan. 16 '96	1 0 0	160,000	Rand......	18, St. Swithin's-ln.
,, North ...	¾ 1	¾ 1	1 0	—	1 0 0	116,091	—	,,
,, West......	3⅜ 3⅝	3⅜ 3⅝	1 0	—	1 0 0	120,000	Rand	,,
Venterskroon	¾ 1	3¾ 1	—	—	1 0 0	125,000	Rooderand	8, Old Jewry
Vesta	⅞ 1	1 1¼	1 0	—	1 0 0	130,000	Rand	Winchester House
Village Main Reef	6⅝ 6⅞	6¾ 7	1 0	—	1 0 0	177,000	,,	8, Old Jewry.
Vogelstruis Estate	3⅛ 3½	3⅜ 3⅞	1 0	—	1 0 0	200,000	,,	Winchester House.
,, Cons. Deep ...	2⅜ 2⅛	2⅜ 2⅜	1 0	—	1 0 0	327,750	,,	16, Geo. St. Mn. Ho.
Wassau ......*G*	⅜ ⅞	⅜ ⅞	1 0	—	1 0 0	100,000	Gold Coast	147, Cannon-street
Wemmer ......*G*	9¾ 10	9¾ 10	1 0	£1 Feb 13 '96	1 0 0	55,000	Rand......	19, Bury-street.‡
Western Nigel......	13/16 15/16	⅞ 1	1 0	—	1 0 0	207,000	Main Reef	Suffolk House.
West Rand......*G*	1⅜ 1¾	1 9/16 1 11/16	1 0	—	1 0 0	240,000	Rand...... .	13, Geo. St., Mans Ho.
Willoughby's Con.	1 11/16 1 13/16	1⅜ 1⅞	1 0	—	1 0 0	700,000	Mashonald	3, Copthall-bldgs.
Witwatersrand *G*	5⅜ 6	5⅞ 6⅛	1 0	—	1 0 0	250,000	Rand......	19, Bury-st., E.C.
Wolhuter ......*G*	7⅝ 7⅞	7⅞ 8⅛	1 0	rts Apr 26 '94	1 0 0	130,000	,,	Warnford-court.†
Worcester ......*G*	4¼ 4½	4⅜ 4⅝	1 0	2/-Mar 12 '96	1 0 0	90,727	Rand......	8, Old Jewry.‡
Zambesia Explora.	2⅛ 2¼	2⅜ 2⅞	1 0	—	1 0 0	65,000	Transvaal .	30-31, Clement's lane

BRITISH MINES.

Name.	Closing Price, Apr.24, 1896	Closing Price, Apr. 17, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Basset	1¼ 1⅜	1⅛ 1¼	£		£ s. d.			
Blue Hills ......*CT*	1/ 2/	1/ 2/	*	2/- May,'81	5 19 5	5,353	Cornwall	Camborne.
Carn Brea ......*T*	4/ 5/	⅜ ⅜	*	2/6 Dec.,'93	22 8 5	6,000	Cornwall	Carn Brea.
Cook's Kitchen ..*T*	¼ ⅜	¼ ⅜	*	—	35 15 10	4,900	,,	Camborne.
Devon Gawton *CA*	15/ 20/	⅞ 1	1 0	—	0 12 6	25,000	Tavistock	8, Finsbury circus,
,, Gt Cons.*CA*	20/ 21/	1 1⅛	5 0	1/6 May '95	2 0 0	10,240	Devon ...	,,
Dolcoath ......*T*	14/6 15/6	14/6 15/	1 0	—	1 0 0	188,000	Cornwall	Camborne.
,, ...	4/ 5/	3/6 3/9	1 0	—	0 5 0	25,000	,,	,,
Drakewalls *CTM*	/9 1/	/6 /9	5/	—	0 2 0	61,856	,,	Dashwood House.
East Halkyn......	—	20/ 25/	1 0	—	0 2 6	12,000	Flintshire	67, Lord St., Liverpl
,, Pool ......*AT*	2⅜ 2¾	2⅜ 2¼	*	1/6 Sept, '94	0 9 9	6,400	Cornwall	Illogan.
Great Laxey......*L*	1⅛ 1¾	1⅜ 1⅜	4 0	5/- Apr.,'92	4 0 0	15,000	I. of Man	Douglas, Isle of Man
Green Hurth ...*L*	1/6	1/6	1 0	-/6 June '89	0 19 0	1 000	Cmberlnd	Newcastle.
Halkyn ...... *L*	—	9 10	1 0	8/- Mar. '96	1 0 0	10,000	Flintshire	Chester.
Do.Dis. Mn,Drain	—	10 11	10 0	5% Aug. '95	10 0 0	10,000	,,	Corn Ex.Cmb, Chestr.
Isle of Man ......*L*	5⅞ 6⅛	5⅞ 6⅜	5 0	12% Feb.27 '96	5 0 0	11,000	I. of Man	Chester.
Killifreth ......*T*	6/ 7/	5/9 6/3	*	1/6 Nov.,'94	5 15 6	6,000	Cornwall	Truro.
Leadhills ......*L*	1 1⅛	1 1⅛	5 0	1/- Oct. 18 '96	5 0 0	20,000	Lanarksh.	30, Finsbury-circus.
Llanarmon	par	par	1 0	—	1 0 0	21,990	Denbigh	8. Werburgh Chmbrs
,, ...	par	par	1 0	—	0 15 0	3,790	Flintshire	Chester.
Levant ......*CT*	4 4⅛	4¼ 4⅛	*	4/- Nov.,'94	11 9 6	2,600	Cornwall	Penzance.
Nenthd&Tudie.*LZ*	1/6	1/6	1 0	6% Feb., '91	0 18 0	48,8(5	Nthumbld.	Newcastle-on-Tyne.
Polberro ......*T*	¼ ⅛	¼ ⅛	*	—	2 1 5	18,000	S.Agnes,Cl.	37, Walbrook.
Rhosemor ......*L*	par	par	1 0	10 p c Sept. 91	1 0 0	1,010	Flintshire	Corn Ex. Cmb. Chestr.
So. Condurrow *TC*	1/ 2/	1/6 2/	*	3/6 Apr. '93	7 17 6	6,123	Cornwall	20, Great St. Helens
,, Crofty *TA*	1/ 2/	⅜ ¼	*	—	17 10 5	5,769	,,	Pool, Cornwall.
,, Halkyn	par	par	1 0	—	1 0 0	10,000	Flintshire	8, Werburgh Chmbrs
Talacre	par	par	1 0	—	0 16 0	20,000	,,	84, Forgate st., Chstr
Tincroft ......*T*	⅜ ⅝	⅜ ⅝	*	2/- Aug. '94	15 7 6	6,000	Cornwall	Carn Brea.
Weardale ......*L*	8/9	8/9	4 0	1/3 Oct. '90	1 10 0	50,000	Durham...	3, Lombard-court.
West Frances ...*T*	/6 1/	1/6 2/6	—	2/6 May,'89	17 1 7	6,144	Cornwall	Camborne.
,, Kitty ......*T*	2 2¼	2 2⅛	*	2/- Dec, '94	1 2 0	6,000	,,	37, Walbrook.
Wheal Agar ..*TA*	4/ 5/	5/ 6/	*	2/6 Aug.'88	23 15 2	6,000	,,	Redruth.
,, Friendly..*T*	1/ 1/6	1/ 1/6	*	—	0 12 9	10,000	,,	2, Copthall Bldgs, EC
,, Grenville *T*	5⅞ 6⅛	6 6½	*	3/- Nov 28 '95	18 2 0	6,000	,,	7, Union-court, E.C.
,, Kitty......*T*	3/ 4/	⅜ ¼	*	3/- Mar, '88	4 5 6	8,590	,,	Truro.
,, Metal&F.*T*	3/ 4/	3/3 4/	*	—	0 3 0	60,000	,,	14 Broad-street Av.

EUROPEAN MINES.

Name.	Closing Price, Apr.24, 1896	Closing Price, Apr. 17, 1896.	Am't. of Share	When last XD and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£					
Alamillos ......*L*	1⅛ 1⅜xd	1¼ 1⅜xd	2 0	1/9 Apr 15 '96	2 0 0	35,000	Spain	6, Queen-street-place
Consett Ore	6¼ 6⅝	6¼ 6⅝	1 0	8/- July 94	1 0 0	65,200	Spain	19, Grey-st, N'castle.
Fortuna ......*L*	1⅛ 1⅜xd	1⅛ 1⅜xd	2 0	1/- Apr 15 '96	2 0 0	25,000	Spain	Dashwood Ho., E.C.
Libiola......*C*	2⅞ 3⅛	2⅞ 3⅛	5 0	2/- Sept. 27'95	5 0 0	60,400	Italy	6, Queen-street-place.
Linares ......*L*	5¼ 5⅜xd	5¼ 5⅜xd	3 0	9/- Apr 15 '96	3 0 0	14,998	Spain	37, Cannon-street,
Mason & Barry...*C*	2⅞ 3⅛	3⅛ 3⅜	5 0	2/ May 23 '94	5 0 0	185,172	Portugal	6-7, Queen-street-pl.
Pestarena ......*G*	6/6 7/6	6/ 7/	3 0	—	3 0 0	67,809	Italy	,,
Pontgibaud ......*SL*	—	—	20 0	11/6 Dec. '94	20 0 0	14,000	Coueron..	30, St. Swithin's-lane
Rio Tinto ......*C*	19 19¼	18⅜ 18⅞	10 0	10/- Oct,30 '95	10 0 0	325,000	Spain	,,
,, (1st Mrt. Bds)	102 103	101⅛ 102⅛	100 0	4% Apl. 1, 96	100 0 0	£3600,000	,, ...	120, Bishopsgt-st, Wn
Ripanji ......*SQ*	—	—	1 0	—	0 19 0	95,000	Servia	Glasgow.
Tharsis...... *C Sul*	5⅜ 5⅝	5⅜ 5⅝	2 0	4/- Apr 26 '95	2 0 0	625,000	Spain	Walbrook House, EC
West Prus Pre.pref	—	—	10 0	8% Dec. '95	10 0 0	365	Germany	
,, Prussian Pre.	—	—	10 0	6% Dec. '95	10 0 0	5,450	,,	,,
,, Prussian Or.	—	—	10 0	4% Dec. '95	10 0 0	14,050	,,	,,
Woulfahrt ......*L*	—	—	1 0	3% Dec. '94	1 0 0	99,634	Prussia ...	17, Victoria-st. S W
,, ...	—	—	1 1	3% Dec, '94	0 10 0	9,090		,,

"THE MINING JOURNAL" SHARE LIST—(Continued)

AUSTRALIAN AND NEW ZEALAND MINES.

Name.	Closing Price, Apr. 24, 1896	Closing Price, Apr. 17, 1896.	Am't. of Share	When last XD and Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Abbotts£/6pm.pd G	⅛ ⅜	⅛ ⅜	£1 0	—	£1 15 0	67,000	Murch.WA	139, Cannon-street
Achilles Gld Fld.	2/3 2/9	2/9 3/-	2/6	—	0 2 6	642,456	Otago, N.Z	11, Poultry.
Aladdins Lamp G	15/16 17/16	15/16 17/16	1 0	1/ Feb. 13 '96	1 0 0	100,000	B'knN S.W	4-6, Throg. Avenue.
Anglo-Con. G. Syn	2⅜ 2½	2⅜ 2½	1 0	100% '95	1 0 0	99,000	—	22, Austin Friars.
" Founders...	35 45	35 45	1 0	£4 16/8 2-5d'95	1 0 0	1,000	—	"
" French Exp	⅞ 1 pm	⅞ 1pm	1 0	5/- Oct 30 '95	0 10 0	40,000	W. Austral	79, Queen Street.
" Ger. Explor.	1 1⅛ pm	1⅛ 1⅜pm	1 0	5/ Oct, 30 '95	0 10 0	50,000	"	"
Arrow Brownhill G	⅛ ¾	⅜ ¾	1 0	—	1 0 0	90,007	Cool.,W.A.	4, Gt. Winchester St.
Assoc. Gold Mines	1⅞ 2	115/16 21/16	1 0	—	1 0 0	375,000	"	20, Bucklersbury
Australasian ......G	3/9 4/3	3/9 4/3	1 0	-/8 Mar.. '92	1 0 0	10,000	Gymp.Q'ld	6, Queen-st. place
Australian C	—	—	20 0	-/9 Aug. '95	7 7 6	218,315	S. Austral.	42, New Broad-street
Aus. Bro. Hill Con.	1/ 1/6	1/- 1/6	1 0	1/- June, '91	1 0 0	22,708	BarR.NSW	Winchester House.
Baker's Creek ...G	⅝ ⅞	½ ¾	1 0	1/- May '95	0 17 6	500,000	H'gveNSW	Hillgrove, N.S.Wale.
Bardoc..............G	⅝ ¾	⅝ ¾	1 0	—	1 0 0	165,000	W. Austral	43, Threadneedle st.
Bayley's Rew..rd G	4/ 5/	4/6 5/	1 0	-/4 Dec. 94	1 0 0	480,000	Coolgardie	F'sb'y. H. Bl'mf'ld St.
Big Blow ....G	⅝ ¾	⅝ ¾	1 0	—	1 0 0	150,000	"	151, Cannon Street.
Blackett's Claim G	⅜ ⅝	⅜ ⅝	1 0	—	1 0 0	55,000	"	16, St. Helen's Place.
Black Flag Consld.	17/16 19/16	17/16 19/16	1 0	—	—	—	W. Austral	4, Bishopsgte St. Wn
" Propty.	11/16 13/16	¾ ⅞	1 0	—	1 0 0	140,000	Coolgardie	1, Metal Exch. Bldgs
Blagroves Freehld	4/ 4/6	4/ 4/6	2/6	—	0 2 6	500,000	Corom. N.Z	Dashwood House.
Bonnie Dundee G	6/ 7/	6/ 7/	1 0	—	0 18 6	120,000	C. T.Q'land	16, S. Helen's Place
Brilliant ....G	13/16 15/16	13/16 15/16	2 0	-/3 Feb 18, '96	2 0 0	250,000	"	Charters Towers.
" Block...G	1⅜ 1½	1⅜ 19/16	1 0	-/6 Dec 16 '95	1 0 0	70,000	"	16, S. Helen's Place
" St.Geo.G	1¾ 1⅞xd	1¾ 1⅞xd	10/	-/9 Apl. 15 '96	0 10 0	72,000	"	Charters Towers.
Br. Brok. Hill S	1⅛ 1⅜	19/ 20/	1 0	—	1 0 0	240,000	N.S. Wales	Dashwood Ho., E.C.
Broad Arrow	2/3 2/9	2/3 2/9	5/	—	0 4 6	100,000	W.Feather	57, Moorgate Street
Broken Hill Prop.S	⅛ 2⅛ xd	25/16 27/16xd	8/	1/- Apl. 15 '96	0 8 0	960,000	N. S. Wales	3, Gt. Winchester st.
Brownhill Propty.	2⅝ ⅞	¾ 1	1 0	—	1 0 0	125,000	"	4, Gt. Winchester st
Burbank's Birthd'y	13/16 15/16	13/16 15/16	1 0	—	1 0 0	150,000	Coolgardie	Copthall House.
Caledonian ......G	1/6 2/6	2/6 3/6	1 0	—	—	120,000	W. Austral	Portland House.
Cassidy Hill ......G	11/16 13/16	13/16 15/16	1 0	—	1 0 0	115,000	Coolgardie	35, New Broad Street
Central Boulder G	13/16 15/16	13/16 15/16	1 0	—	1 0 0	93,522	K'lg'rl.WA	Wor'st'r Ho., Walbr'k
" Exp. & Invst.	5/16 1/16 dis	⅛ dis par	1 0	4'8d Mar 12'96	—	—	W. Austral	1, Met. Exchg. Bldgs
" " of W.A.	1⅜ 1¾	13/16 15/16	1 0	1/7½ Mar 27 96	1 0 0	122,000	W. Austral	2, "
Charters Tow. ...G	1/3 1/9	1/3 1/9	10/	—	0 9 6	200,000	Queenslnd	110, Cannon Street
" Consolid....	/6 1/	/6 1/	10/	—	0 9 6	300,000	"	110, "
Colonial Finance...	4 4½pm	4 4½pm	1 0	10/ Mar. 27 '96	0 10 0	21,140	W. Austral	139 "
" Gold Fields	⅜ ⅝pm	⅜ ⅝ pm	1 0	—	0 12 6	75,250	"	70, Cornhill.
Con. G. M. of W. A.	⅛ ⅝	7/16 9/16	1 0	—	1 0 0	246,779	Pilbarra ...	30, Moorgate Street.
" Murchison ...	⅝ ¾	⅝ ¾	1 0	—	1 0 0	225,533	Murc.,W A	Broad Street House.
Contl. & W.A. Trust	⅞ 1⅛	⅞ 1	1 0	—	1 0 0	104,467	W. Austral	Broad Street House.
Coolgardie Go'd ...	1 1⅛	⅞ 1⅛	10/	1/ Feb. 18 '96	0 5 0	90,000	Coo'.W.A.	Broad Street Avenue.
" Mint & I.Kg.	15/16 11/16	15/16 11/16	1 0	—	1 0 0	150,000	"	30, S. Swithin's ln.
Craven' Cal. ... G	1/6 2/6	1/6 2/6	6/	-/3 June 94	0 4 8	100,000	Queenslnd	30-1, S. Swithin's-le.
Croesus So. United	1 1¼	11/16 13/16	1 0	—	1 0 0	115,000	Hann'sWA	Blomfield House
Crown United......	11/16 13/16	11/16 13/16	1 0	—	1 0 0	75,000	—	110, Cannon-st., E.C.
Cumbrlnd (New) G	/9 1/3	/9 1/3	1 0	2/6 Dec. '87	0 19 0	184,890	Queenslnd	Blomfield House. E C
DayDawn B.&W. G	12/ 12/6	11/9 12/3	1 0	-/6 Mar 12 '96	1 0 0	498,400	"	16, S. Helen's Place
" P. C. G	3/3 3/9	3/9 4/3	1 0	-/6 Apr. '92	1 0 0	490,000	"	Winchester Ho.. E C
Eaglehawk.........G	1/6 2/6	1/6 2/6	1 0	—	0 18 0	120,000	Victoria ...	71-72, King Wm. St.
Eagle's Nest.........	par ¼ pm	par pm	1 0	—	1 0 0	72,500	Mt. Margrt	Finsbury House.
Explorers Synd. ...	par ¼	par ¼ pm	1 0	—	0 5 0	9,000	W. Austral	Copthall House
Fingall R'fs. Extd	⅝ ⅞	⅝ ⅞	1 0	1/4 Jan. 16 '96	1 0 0	150,000	"	4, Sun Court
Florence...........G	1⅝ 1¾	1⅝ 1¾	1 0	—	1 0 0	60,000	"	18, St. Swithin's ln
Gibraltar Cons......	13/16 15/16	13/16 15/16	1 0	—	1 0 0	300,000	N S Wales.	6, Queen-street-place
Gladiator ....G	¾ 1	¾ 1	1 0	—	1 0 0	—	W. Austral	43, Threadneedle st
Glenrock .... G	1/9 2/3	1/9 2/3	1 0	—	0 8 0	225,000	N. Zealand	3-5, Queen-st. E.C.
Golden Cement G	⅛ ¼pm	1⅛ 1¼	1 0	—	0 10 0	—	W. Austral	79, Queen Street, E.C.
" Crown... G	211/16 213/16	2⅛ 2¼	1 0	—	1 0 0	100,000	"	77, Bishopsgate-st.
" Gate......G	/6 1/6	/6 1/6	10/	—	0 10 0	150,000	Queenslnd	34-36, Gresham-st.
" Horse Shoe...	15/16 17/16	15/16 17/16	1 0	—	1 0 0	—	W. Austral	13, Helen's Place
" Link ......G	15/16 11/16	15/16 11/16	1 0	5/- Oct 30' 95	1 0 0	90,000	"	Dashwood House
" Plum......G	15/16 17/16	1¼ 1⅜	1 0	—	1 0 0	120,000	"	4, Bishopsgate Street
Gold Estates.........	2¼ 2⅜	2¼ 2⅜	1 0	3/ Dec 30 '95	1 0 0	60,000	"	20, B'shopsgte-st Wn
Great Boulder ...G	713/16 715/16	7⅞ 8	1 0	2/- Mar. 27 '96	1 0 0	240,000	Yilgarn ...	3, Gracechurch st.
" " Junction	1⅛ 1⅝	1⅛ 1⅝	—	—	—	—	"	Worc. Ho., Walbrook
" " M'n R'fs	1⅜ 1¾	13/16 15/16	10/	—	0 10 0	240,000	—	3, Princes Street.
" Fingall Rfs.	1 1⅛	1 1⅛	1 0	5% Jan. 16, 96	1 0 0	175,000	Kurnalpi	Broad Street House
Gresham Synd. ..	¾ 1 pm	¾ 1pm	1 0	4/- Oct 30 '95	1 0 0	50,000	W. Austral	13-14, Abchurch ln.
Hainault	1¼ 1⅜	1¼ 1⅜	—	—	—	—	—	12, Gordon st., Glas.
Hampton Gold Flds	⅜ ⅝	⅜ ⅝	1 0	—	0 10 0	—	—	9, S. Mildred's Ct.
" Gold Hill	/6 1/	-/6 1/-	1 0	—	—	—	—	93-94, Gracechurch st
" Plains...	47/16 49/16	4⅜ 4½	1 0	—	1 0 0	300,000	Cool. W.A.	29, S. Swithin's lane
" Plains Ex	8/6 9/6	8/6 9/6	1 0	—	0 18 0	180,000	"	Suffolk House, E.C.
Hannan's Brwn Hil	67/16 69/16	6⅛ 6⅜	1 0	—	1 0 0	65,000	"	Broad Street House.
" Main Reef...	10/6 11/6	10/6 11/6	10/	—	0 10 0	—	Kalg. W.A.	18, St. Swithin's ln.
" North.........	11/16 13/16	1 1¼	1 0	—	1 0 0	51,107	"	33, Cornhill.
" 100 Acre......	¾ 1	¾ 1	1 0	—	—	—	"	Dashwood House.
" Oroya.........	1¼ 1⅜	13/16 15/16	1 0	—	1 0 0	—	"	20, Bucklersbury
" Prop.	1⅝ 1¾	111/16 113/16	1 0	—	0 10 0	—	—	139, Cannon Street.
" Reward... G	3¾ 4	313/16 315/16	1 0	—	1 0 0	70,000	Hann. WA	Bartholomew Ho.
" Star...........	1 1⅛	11/16 11/16	1 0	—	1 0 0	—	E. Coolgde.	Finsbury House E.C
Hauraki........... G	15/6 16/	16/ 16/6	2/6	1/ Mar. 27 '96	0 2 6	250,000	Coromnd..	Dashwood Ho.; E.C
Hawk's View	⅜ ⅝	⅜ ⅝	1 0	—	1 0 0	40,000	W. Austral	71-72, King Wm. St.
Hit or Miss	1⅛ 1⅜	15/16 17/16	1 0	—	1 0 0	120,000	Cool., W.A.	1, Queen Vic. St.
Idaho ....GS	5/ 5/6	5/ 5/6	10/	-/6 Jan. 16 '96	0 5 0	143,439	W. Austral	Copthall House.
Kaboonga ....G	1/3 1/9	1/3 1/9	10/	—	0 9 9	249,250	Queenslnd	70-71, Bishopsgate st
Kalgurli.............	1⅛ 1¾	1¾ 1⅞	1 0	—	1 0 0	34,000	W. Austral	40, Threadneedle-st
Kapanga............G	14/6 15/	12/6 13/	1 0	rts May 24 '95	0 19 6	249,760	N. Zealand	9, New Broad-street.
Kinsella (New)...G	7/6 8/6	7/6 8/6	1 0	—	0 18 0	80,340	Murchison	33, Broad-st. Avenue
Kintore ....G	⅛ ½ pm	⅛ ¾ pm	1 0	—	0 15 0	44,000	W. Austral	13, Abchurch lane.
Komata Reefs	5/9 6/3	5/9 6/3	5/-	—	0 5 0	—	Ha'raki, NZ	Dashwood House.
Kurnalpi............G	9/ 10/	10/6 11/6	1 0	—	—	—	Coolgardie	Throgmorton House
Lady Loch...........	311/16 313/16	313/16 315/16	1 0	—	1 0 0	70,000	"	34-36, Gresham-st.
" Mary Amalg.	¾ 1	¾ 1	1 0	—	1 0 0	46,000	Murchison	Finsbury House.
" Shenton	27/16 29/16	27/16 29/16	1 0	—	1 0 0	—	—	18, St. Swithin's ln
LakeView & E. Bldr	3⅜ 4	3⅜ 4	10/	-/6 Jan. 2 '95	0 7 6	—	—	90, Cannon Street.
Limerick	1⅛ 1¼	1⅛ 1¼	1 0	—	1 0 0	52,537	Coolgardie	Leadenhall Buildgs.
Ln. & Con Invest.	⅛ 3/16 pm	1/16 3/16 pm	1 0	—	1 0 0	500,000	W. Austral	79, Queen Street.
Lon. & Globe Fin.	2⅞ 3	2½ 2⅝	1 0	rts Mar. 27 '96	0 15 0	—	"	15, Austin Friars.
Londonderry......G	7/ 8/	7/ 8/	1 0	—	1 0 0	467,000	"	3, Gracechurch-st.
L.& W. Aust. Expl.	1⅞ 2	115/16 21/16	1 0	4/-Nov 29 '94	1 0 0	270,100	"	Broad Street Ho.
Lon. W. A. Invest.	27/16 29/16	2⅝ 2¾	1 0	4/ Oct 16 '95	1 0 0	100,000	"	"
Mainland Cons. G	2⅞ 3	213/16 215/16	1 0	—	1 0 0	150,000	Murchison	64 Old Broad Street
Mawson's Rewrd. G	⅛ ⅝	9/16 11/16	1 0	—	1 0 0	60,000	"	28 & 29, S. Swithin's ln
Menzies Gold Est.	15/16 11/16	1 1⅛	1 0	—	1 0 0	—	"	Broad Street House
" Gold Reef	111/16 113/16	113/16 115/16	1 0	—	1 0 0	175,000	"	25a, Old Broad Stree
" (O'Driscoll)	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	—	"	16, Tokenhouse Yard
Mills' Day Dawn G	13/16 15/16	13/16 15/16	1 0	-/6 Aug 29 '95	0 15 6	300,000	Queenslnd	16, S. Helen's Place
Mosman ....G	3/6 4/6	3/6 4/6	1 0	—	0 19 0	185,000	N.S. Wales	Bishopsgate House
Mount Lyell...... ..	5⅞ 6⅛	5⅞ 6⅛	3 0	—	3 0 0	300,000	Tasmania	Finsbury House
Mount Margaret...	2⅛ 2⅛	2 2¼	1 0	—	1 0 0	—	W. Austral	23, St. Swithin's ln.
" Morgan G	3⅝ 3⅞	3⅝ 3⅞	1 0	-/6 Mar 12, '96	0 17 6	1,000,000	Queenslnd	9, Gracechurch-st.
" Rowe	13/16 15/16	13/16 15/16	1 0	—	1 0 0	75,000	Coolgardie	44, Coleman Street
Murchison N. Ch'm	7/ 8/	7/ 8/	1 0	1/- Oct 30 '95	1 0 0	160,000	"	23, College Hill.
N'e Hauraki Props	5/3 5/9	5/9 6/3	5/	—	0 5 0	200,000	Ha'raki, NZ	Dashwood House.
" Queen ......G	6/ 7/	6/ 7/	1 0	-/6 Sep 12 '95	0 19 6	158,915	Queenslnd	71-72, King Wm. St.
Newman	1⅜ 1⅝	1⅜ 1⅝	1 0	—	1 0 0	200,000	Dundas ...	30, S. Swithin's lane
North Boulder......	10/ 11/	7/6 8/6	10/-	—	0 10 0	—	W. Austral	18, Helen's Place
" Coolgardie ...	1/ 1/6	1/ 1/6	5/	—	0 4 0	400,000	Pilbarra ...	226, Winchester Ho.
" Kalgurli	1 1¼	1 1¼	1 0	—	1 0 0	—	—	11, Abchurch lane
" Q'ld. M. Agency	1⅛ 1⅜	1⅛ 1¼	1 0	30% Aug. '95	1 0 0	90,000	Queenslnd	10 New Broad Street
Omnium G M Assoc	¾ 1	¾ 1	1 0	—	1 0 0	80,000	—	Broad-streeet House
Paddington Cons.	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	75,000	W. Feather	77, Bishopsgate-st.
Pambula	—	—	1 0	—	1 0 0	70,000	N S Wales.	Winchester House.
Pilbarra G. F.	13/16 15/16	11/16 15/16	1 0	—	1 0 0	100,000	Pilb, W. A.	38, Coleman-street.
Ramage Syndicate	3¾ 4	3¾ 4	1 0	£2 & rts F.13 96	1 0 0	50,000	W. Austral	4, Bishopsgate-st.
Royal Oak	1/9 2/3	1/9 2/3	5/	—	0 3 0	200,000	N. Zealand	Dashwood House.
" Sovereign ...	1¼ 1⅜	1¼ 1⅜	1 0	—	1 0 0	60,000	Coolgardie	8, Old Jewry, E.C.
Sherlaws	12/6 13/6	12/6 13/6	1 0	—	1 0 0	25,000	"	Broad Street Avenue
Scottish Australian	⅜ ⅝	⅜ ⅝	1 0	/3 Aug., '95	1 10 0	200,000	N. S. Wales	Winchester Ho. E.C.
Scotty's Hauraki...	3/ 3/6	3/ 3/6	5/-	—	0 2 0	400,000	N. Zealand	5, Drapers gardens
South Kalgurli ...	13/16 15/16	⅞ 1	1 0	—	1 0 0	60,000	W. Austral	20, Great Win. St.
Sunny Shot & Excl	⅝ ⅞	⅞ 1⅛	1 0	—	1 10 0	—	Pilb., W A	30, S. Swithin's lane.
Tavora.................	4/ 5/	4/ 5/	10/	—	0 5 0	90,000	N. Zealand	Dashwood House.
Tokatea of Hauraki	1/6 2/	1/6 2/	5/	—	0 3 0	—	"	63, New Broad St.
Town Prop. of W A	11/16 13/16	11/16 13/16	1 0	—	0 15 0	250,000	W. Austral	28-9, S. Swithin's-ln
True Blue	1⅛ 1⅜	15/16 15/16	1 0	—	1 0 0	—	"	Dashwood House.
Victory............ G	¼ 5/16	3/16 5/16	5/	-/3 May, '94	0 5 0	40,000	Queenslnd	32, Gresham-st.. E.C
Waihi.............. G	6¼ 6⅛	6⅛ 6⅜	5/	2/- Mar 12, '96	1 0 0	180,000	N. Zealand	11, Abchurch-ln. E.C
" Silverton	3⅞ 4	4 4¼	1 0	—	1 0 0	60,000	"	23, College Hill
Waitekauri	4⅛ 4⅜	4⅛ 4⅜	1 0	—	1 0 0	136,000	"	"
" Extended ...	8/6 9/6	8/ 9/	10/	—	0 10 0	130,000	"	63, New Broad St.
Waratah............G	10/ 11/	10/ 11/	10/	—	0 10 0	100,000	Orydn, N Z	43, Threadneedle st
Water Trust Min.	¾ 1	½ ¾	1 0	—	1 0 0	120,000	W. Austral	Broad Street House
W. of Nations......	1⅜ 1⅜	13/16 15/16	1 0	—	0 15 0	—	—	77, Bishopsgate-st.
Wentworth ... ...G	1 1⅛xd	1 1⅛ xd	1 0	1/- Apl 15 '96	1 0 0	500,000	N. S Wales	4-6, Throgmort. Av.
W. A. Develop's.	11/16 13/16	1⅛ 1¼	1 0	—	1 0 0	50,000	—	49-53, Moorgate court.
W. Aust. G. Conces	1⅞ 2	111/16 113/16	1 0	3/ Sept 27 '95	1 0 0	£55,000	W. Austral	33, Old Broad st., EC.
W. A. Ex. & Fin.	3 3⅛	3 3⅛	1 0	rts Mar. 27 '96	1 0 0	200,000	"	54, "

AUSTRALIAN AND NEW ZEALAND MINES—(Continued).

Name	Closing Price, Apr. 24, 1896	Closing Price. Apr. 17, 1896	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
W. A. General......	3⅛ 4	3¾ 4	1 0	—	0 14 0	—	W. Austral	28, St. Swithin's-ln.
" Australian G.F.	7⅜ 7⅞	7⅝ 7⅞	1 0	rts Mar 12 '96	1 0 0	65,000	Coolgardie	28-29, "
" " Mines Dvl	1¾ 2¼pm	1¾ 2¼ pm	1 0	10/ Oct 30, 95	1 0 0	40,000	W. Austral	3, Princes Street
" Aust. Mining	9/3 9/9	9/6 10/	5/	7½d. Mar. 27'96	0 5 0	320,000	"	257, Winchester Ho.
" Aust. Pioneer.	2 2¼pm	2 2⅛pm	1 0	rts Oct 19 95	0 15 0	19,993	"	139, Cannon-street.
" " Share Corp.	9/16 11/16 pm	⅝ ¾ pm	1 0	—	0 5 0	200,000	"	28, St. Swithin's ln
" " Venture......	2¼ 2⅜pm	2¼ 2⅜ pm	1 0	15/ Oct. 30 '95	1 0 0	—	"	3, Princes Street.
West Boulder	⅞ 1	⅞ 1	—	—	—	—	—	
White Feather ...	2⅛ 2⅜	2¼ 2⅜	1 0	—	1 0 0	60,000	Coolgardie	28 & 29, S. Swithin's ln
Zapopan............G	4/ 5/	3/16 ¼	1 0	—	1 0 0	25,000	N W Austra	70, Bishopsgate-street
Zeehan Montana S	—	—	1 0	-/4 Dec. 95	1 0 0	66,000	Tasmania	11, Queen Victoria st
" " ...	—	—	1 0	2½ Dec. 95	0 2 6	12,000	"	"

NORTH AMERICAN MINES.

Name	Closing Price, Apr. 24, 1896	Closing Price, Apr. 17, 1896	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Alaska Mexican...G	1⅛ 1¾	1⅛ 1¾	$5	4 4-5d. Feb., 96	$5	160,000	Alaska......	30, St. Swithin's-ln
" Treadwell G	5⅛ 5¾	5¾ 5¾	$25	1/6 Dec 24, '95	$25	200,000		
Anglo Mexican ...S	¼ ½	¼ ½	5 0	1/- Apr. 15 96	5 0 0	74,850	"	23, College Hill.
Arizona (Pref.) Cu	55/ 55/6	49/6 50/-	4 0	1/6 Feb. 13, '96	4 0 0	158,920	Arizona ...	74, Geo.-st., Edinbor
" 6½ A Deben.	111 112	108 108¾	100 0	½% Oct. 30 '95	100 0 0	£135,300	"	"
" 7% B Deben.	101⅛ 102	96½	100 0	7% Oct. 30 '95	100 0 0	£181,300	"	
De Lamar.........GS	17/6 18/6	17/ 18/	1 0	1/- Feb. 13 '96	1 0 0	400,000	Idaho......	6, Drapers-gardens.
Dickens Custer GS	-/9 1/3	-/9 1/3	1 0	—	0 19 9	420,000	"	Winchester Ho. E.C.
Doric..................G	8/ 8/6	8/ 8/6	5/	—	0 5 0	125,000	Colorado...	
Elkhorn Priority S	⅛dis ⅛ pm,	⅛dis ⅛pm	1 0	-/3 June 26 '95	0 10 0	175,007	Montana	6, Draper's-gardens.
Gen. M'g. Assoc. ...	6¾ 7¼	6¾ 7¼	5 10	14/- Apr. 95	5 10 0	27,469	C. Breton	Blomfield House
Golden Feather G	⅛ ⅝	½ ⅝	1 0	—	1 0 0	180,000	California	8, Stephens Cs E.C.
" Gate ......G	3/- 4/-	3/ 4/	1 0	—	0 19 6	79,600	"	
" Leaf...... G	1/- 1/6	1/ 1/6	1 0	—	1 0 0	300,259	Montana	6, Draper's Gardens.
Harquahala... .. G	3/6 4/6	3/6 4/6	1 0	-/6 Nov. 14, '94	1 0 0	300,000	Arizona ..	6, Draper's Gardens.
Holcomb Valley G	1/- 1/6	1/ 1/6	5/	—	0 5 0	540,000	California	14, Cornhill. E.C.
Jackson Goldfields	/6 1/-	/6 1/-	5 0	—	0 5 0	408,635	"	11, Poultry, E.C.
La Plata............S	1/ 1/3	1/ 1/3	5/	1/3 Oct. '82	0 4 6	405,000	Colorado	11, Poultry, E.C.
La Yesca ....GS	3/- 4/-	3/6 4/6	1 0	—	0 19 6	200,000	Mexico ...	20, Bucklersbury, EC
Lyonnaise Mexican	⅜ ⅝	¾ 1	1 0	—	1 0 0	140,000	"	3, Broad St. Bldgs.
Montana........ GS	8/3 8/9	8/6 9/6	1 0	-/3 Mar 27 '96	0 19 0	657,158	Montana	Gresham House, E.C.
New Guston ......S	⅛ ⅜	⅛ ⅜	1 0	1/- Oct. '92	1 0 0	110,000	Colorado	25A, Old Broad-st.
Palmarejo ......GS	2/3 2/9	2/ 2/6	1 0	—	1 0 0	418,888	Mexico ...	32, Old Jewry, E.C.
PinosAltos (Df) GS	⅛ 3/16	⅛ 3/16	1 0	-/6 Mar.' 90	1 0 0	100,000	"	110, Cannon-street.
Richmond ...GSL	⅞ 1⅛	¾ 1	5 0	1/- Dec. 16 '95	5 0 0	54,000	Nevada ...	44, Coleman-street.
St. George	1/ 2/	1/ 2/	5/	—	0 4 9	—	G'o'giaUSA	8. Geo Ho., E'cheap
Sierra Buttes ...G	⅜ ½	7/16 9/16	2 0	-/6 Oct. 30 '95	2 0 0	122,500	California	138, Leadenhall-st.
" Plumas Eur. G	⅛ ⅜	11/16 13/16	2 0	-/9 Oct. 30 '95	2 0 0	140,265	"	"
Springdale.........G	/10½ 1/1½	/10½ 1/1½	$1	-/2 Sep. 28, 9	$1	1,000,000	Colorado	20, Abchurch Lane.
Twin Lake Placers	1 1¼	1 1⅛	1 0	3/- Feb. '95	1 0 0	26,000	"	5, Lawrence P. Hl. E

SOUTH AND CENTRAL AMERICAN MINES.

Name	Closing Price, Apr. 24, 1896	Closing Price, Apr. 17, 1896	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Anglo-Chilian Pf N	10⅛ 11	10¼ 10¾	10 0	7/0 Feb. 27 '96	10 0 0	35,000	Antofagst.	123, Bishops.-st. W
" 6% Rylst MB	108 110	108 110	100 0	6% Jan. 2 '96	100 0 0	£200,000	"	
Argen. Concessions	1/9 2/3	1/6 2/6	2/	—	0 2 0	150,000	S. Luis ...	3 & 5, Queen Street.
Caratal............ G	/6 1/	-/6 1/	2/6	—	0 2 6	1,330,000	Venezuela	57, Moorgate-st. E.C
Caylloma............S	13/16 15/16	13/16 15/16	2 0	1/- Apr. 94	2 0 0	125,000	Peru	52, Leadenhall street
Colon ....G	-/3 /9	-/3 /9	5/	—	0 4 0	200,000	Colombia	5, Copthall-bdgs., E.C
Colorado Nit. ...N	1¼ 2	1¾ 2¼	5 0	2/6 Dec. 16, '95	5 0 0	32,000	Chili	12, King-st., Liverp'l
Colombia.......G	—	—	20 0	10 frs. Aug. 94	20 0 0	—	Venezuela	Ciudad Bolivar.
Colombian Hy...G	7/16 9/16	7/16 9/16	1 0	1/- Jy 26, '95	1 0 0	75,000	Colombia	10, Blomfield-street
Copiapo C	2 2¼	2 2¼	2 0	2/6 Dec. 16 '95	2 0 0	100,000	Chili	Dashwood House, E.C
Darien "A" ......G	5¾ 6¼	5⅞ 6	1 0	—	1 0 0	49,553	Colombia	Manchester.
" "B"	7⅜ 8	7¾ 8	1 0	x.nw Dec 30 '95	1 0 0	30,000	"	"
Don Pedro.........G	1/ 1/6	1/ 2/	1 0	—	1 0 0	133,102	Brazil	24-5, Devonsh. Cs E.C
El Callao ....G	⅛ ⅜	⅛ ⅜	5 0	9½d. Feb. '94	5 0 0	257,600	Venezuela	8, Bishopsgt.-st, Wn
Frontino & B....G	1 1⅛	1 1⅛	1 0	6d. Jan. 16 '96	1 0 0	128,662	Colombia	184, Gresham House;
Glenrock ....G	1/9 2/3	1/9 2/3	1 0	—	1 0 0	199,948	Arg. (& I.)	3-5, Queen-street, E.C
Gravel...... ....G	1/6 2/6	1/6 2/6	1 0	—	1 0 0	100,000	Colombia	10, Blomfield-street
Guadalupe ......GS	3/6 5/-	3/6 5/	1 0	—	1 0 0	120,000	Honduras	1A, Union ct. Old Brd
Julia Taltal ....N	⅛ ¼	⅛ ¼	1 0	—	1 0 0	105,234	Nicaragua	139, Cannon-street.
Lagunas ....N	3¼ 3⅛	3¼ 3⅛	5 0	15p.c. Dec. '94	5 0 0	120,000	Tarapaca	3, Gracechurch st;
Lautaro ....N	6⅛ 7	6¼ 6¾	5 0	5/- Dec. 30 '95	5 0 0	110,000	Chili	70, "
Liverpool ....N	8⅛ 9¼	8⅛ 9⅛	5 0	15/-Dec 16, 95	5 0 0	22,000	"	Liverpool.
Loma ....G	-/6	0/ 6/	1 0	—	1 0 0	300,000	Colombia	5, Copthall-building.
London Nit.......N	1¾ 2¼	1¾ 2¼	3 0	3/4¾ Nov. '89	5 0 0	10,000	Chili	9, Gracechurch-st.
" Nit. (Pref.)	3⅝ 4⅛	3½ 4⅛	5 0	8% Nov. 28 '95	5 0 0	22,000	"	"
Macate	1/ 1/6	1/- 1/6	2/	—	0 2 0	200,000	Peru	11, Old Broad-st. E.C
New Tamarugal N	⅛ ¼	⅛ ¼	1 10	1s. Dec. '94	1 10 0	130,000	Tarapaca	50, Lime-street, E.C
" 8% Cum Pref	7/16 9/16	7/16 9/16	1 10	8 p.c. Feb. '95	1 10 0	130,000	"	"
" 6 p.c. Debs ...	86 90	86 90	100 0	6 p.c. Feb. '96	100 0 0	£260,000	"	"
Orita......... ....G	1/9 2/3	1/9 2/3	1 0	1/- April '89	1 0 0	30,000	Colombia	10, Blomfield-street
Ouro Preto ... . G	—	—	1 0	1/- Feb. '96	1 0 0	80,000	Brazil	6, Queen-street-place
Pac. & Jaspampa N	1¾ 2	1¾ 2	5 0	4/- May, '95	5 0 0	72,000	Tarapaca	3, Gracechurch-st.
Phœnix	-/9 1/-	/9 1/-	10/-	—	0 8 0	400,000	S. Luis ...	3 & 5, Queen Street.
Quebrada C	1/16 ⅛	1/16 ⅛	3 0	5% Mar. '92	3 0 0	241,956	Venezuela	38, Nicholas Lane.
Rosario ....N	5 5⅛	5 5⅛	5 0	5/- Feb. 13 '96	5 0 0	120,000	Chili	57½, Old Broad-stree
" (5% Deb.)	104 107	104 107	100 0	5% Apr. 1 '96	100 0 0	£475,000	"	"
" Hu'r'Db Serp	105 109	106 109	100 0	5% Jan. 2 '96	100 0 0	£200,000	"	"
St. John del Rey G	1 11/16	20/6 21/6	1 0	x.rts Nov 13 '95	1 0 0	327,650	Brazil	Finsby. Ho., Blmf'd st
San Donato ... ...N	1 1⅛	1⅛ 1¼	5 0	2/6 May 24 '95	5 0 0	32,000	Chili	12, King-st., Liverp
" Jorge ....N	5¾ 6¼	5⅛ 6	0	5/ Oct. 16 '95	5 0 0	75,000	"	9, Gracechurch-st.
" Pablo ....N	2 2⅛	2 2⅛	0	5/ Oct. 30 '95	5 0 0	32,000	"	
" Sebastian ...N	1⅛ 1¾	1⅛ 1¾	5 0	5/ May 24 '95	5 0 0	29,000	"	Dashwood House E.C
Santa Barbara ...G	—	⅛ ⅜	10/	1/3 Dec. '86	0 10 0	60,000	Brazil	Liverpool
" Elena ......N	⅛ ¾	⅛ ¾	5 0	5/- Nov. 15 '94	5 0 0	22,000	Tarapaca	3, Gracechurch-st.
" Rita ....N	3⅛ 4	3⅛ 4	5 0	15/ May 24 '95	5 0 0	20,000	Chili ...	Dashwood House, E.C
Segovia ....G	—	—	5/-	—	0 5 0	120,000	Colombia	5, Copthall-building.
Tolima "A" ......S	6¾ 7¼	6¼ 7¼	5 0	5/-Mar. 12 '96	5 0 0	14,000	"	18, Finsbury-circus.
" "B" ......S	5⅛ 6⅛	5¼ 6½	5 0	5/- Mar 12 '96	5 0 0	6,000	"	"

INDIAN AND ASIATIC MINES.

Name	Closing Price, Apr. 24, 1896	Closing Price, Apr. 17, 1896	Am't. of Share	When last XD and Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office
Balaghat Mysore G	2/9 3/3	3/ 3/3	1 0	—	0 19 0	159,945	India	6-7, Queen-street-p
Burma Ruby......R	¾ ⅞	11/16 13/16	1 0	—	0 18 0	298,551	Burmah...	Suffolk House E C .
Champion Reef...G	6⅞ 7	6⅞ 7	1 0	5/- Jan. 16 '96	1 0 0	220,000	India	6-7, Queen-street-pl.
Colar Central ...G	1/- 1/6	1/ 1/6	1 0	—	1 0 0	200,000	"	Dashwood Ho., E.C.
Coromandel...... G	1 1⅛	1⅛ 1¼	1 0	—	0 17 6	95,000	"	6-7, Queen-st.-place
Gold Flds Mysore G	1 11/16	21/3 22/6	1 0	2/- Feb '96	1 0 0	275,000	"	6-7, Queen-street pl.
Kadur Mysore......	4/ 5/	4/ 5/	5/	—	0 5 0	400,000	"	Copthall House, E.C
Kempinkote Gd Fd	/6 1/	/6 1/	5/	—	0 3 6	750,000	India	6-7, Queen-st.-place.
Mysore .... G	513/16 515/16	5⅞ 6	1 0	4/6 Mar. 12 '96	1 0 0	248,354	"	6-7, Queen-street pl.
My. Harnhalli ...G	-/9 1/3	/9 1/3	1 0	—	0 18 0	100,007	"	2, East India Avenue
" Reefs ...G	8/6 9/6	9/ 10/	1 0	—	1 0 0	160,000	"	6-7, Queen-street-pl.
" West (N) G	1⅛ 1¼	1⅛ 1¼	1 0	rts. Jan. 16 '96	0 19 0	127,402	"	2, Gt. Winchester St.
" Wynaad G	11/16 13/16	11/16 13/16	1 0	rts. Jan. 16 '96	0 19 0	125,000	"	"
Nine Reefs ......G	2/9 3/3	2/9 3/3	10/	—	0 10 0	250,000	"	6-7, Queen-street-pl.
Nundydroog......G	213/16 215/16	213/16 215/16	1 0	2/- Mar 12 '96	1 0 0	200,000	"	"
Ooregum (Df. O.) G	213/16 31/16xd	213/16 31/16xd	1 0	2/6 Apr. 15 '96	1 0 0	145,000	"	"
" (10% Pref.).	3⅞ 4xd	3⅞ 4⅛xd	1 0	2/6 Apr. 15 '96	1 0 0	107,011	"	"
" (10% Pref.).	3⅛ 3⅜xd	13⅜ 3⅜xd	1 0	2/6 Apr. 15 '96	0 5 0	12,989	"	"
Panang Kabang T	1/16 ⅛	1/16 3/16	1 0	—	1 0 0	260,000	Malay Pn.	4a, Jeffrey's st. E.C
Yerrakonda ......G	/9 1/3	/9 1/3	4/	—	1 2 6	187,491	Mysore ...	6-7, Queen-street pl.

MINING IN NEW ZEALAND.

(FROM OUR OWN CORRESPONDENT.)

IN my last letter to you, I mentioned that very rich discoveries were made in the Tairua district, which is situated on the east coast of the North Island, and about 5 miles from the sea coast. A flat road leads from the place of landing by steamer, right up to the new field, which, strange to say, has not been discovered ere this. The position and lay of the country resembles the surrounding country of the Waihi gold mining district. The hill resembles that of the Martha Hill in the latter district, with flat undulating gullies leading from the bare spurs down to flats, where Nature's work fitted the locality for one of the most important gold fields that has ever been brought to light.

The prospectors' party brought into the Thames 18¼ cwts. of ore broken out from across the orebody, which at its point of intersection shows for a thickness of 7 feet. This may be only one portion of the lode because the spur is covered with loose sheddings of ore, and of that size that points to the fact that other lodes will be found trending in close proximity to the one discovered. To return to the parcel of ore brought in for treatment at the Thames School of Mines experimental plant. The ore is of a brownish colour with dark blue seams of sulphide laminating the ore; very little gold was seen—that is, free gold, but excellent prospects are obtainable by panning off the rubbly parts of the reef. The treatment to which the ore was subjected was, firstly, the parcel was dried or partially roasted, then dry crushed. From here a McKay pan is charged, and the whole treatment proceeds by what is termed hot pan amalgamation, which extracted 56 ounces of bullion worth 25s. per ounce, total value extracted from the 18¼ cwts. was worth £70, or at the rate of £80 per ton, and the extraction by this method of treatment was equal to 90 per cent. of the assay value of the ore, which cannot be considered otherwise than highly satisfactory. I may mention that the owners of this new discovery are more or less hard-working miners—men who have struggled hard to discover the hidden wealth of this peninsula. They have designated their property by the title of the Broken Hills, with a splendid area of ground of fully 330 acres in extent. They state that the parcel treated is a fair average test of that part of the lode intersected, and that there is, to all appearances, plenty of the same quality outcropping. Although I have not seen their recent developments, I am thoroughly acquainted with the men and this section of the country, that I have every faith in the genuineness of the discovery. There is an important fact connected with this part of the gold field, and that is a locality where you are in close touch with all the coastal traffic, and in close proximity to abundance of the best Rand timber and water for motive power, and I hope ere long to see this part of this gold field peninsula one of the chief centres of mining; my reasons for prophesying this is because the ore lode is one of the richest of its kind that has been unearthed in the outside districts, and I feel greatly impressed that it will be one of the great factors in stamping New Zealand as one of the richest producers of bullion this side of the hemisphere.

To-day the May Queen Gold Mining Company cleaned up their crushing for the month of February, and the yield of gold, although not quite as high as that won during the fall of the year of 1895, is nevertheless of a highly profitable character as follows:—588 loads of general ore and 60 lbs. of picked stone produced 547 ounces of gold.

The Monatairi gold return is too late in coming to hand for this mail. With reference to the future prospects of this mine, I may mention that at present the various blocks that have produced ore, and from which such excellent gold returns have been obtained during the past 15 months, are now showing signs of giving out as they approach the higher levels; this is due to their approach to the worked out sections, but I must not omit to point out that the lower levels are the points which warrant vigorous development, insomuch as the lodes, when first intersected, proved themselves highly auriferous, and apparently carried the richest ores down to the water levels. It will be seen that the developments here will have to be conducted on a more gigantic scale, and the company's present shafts sunk down to a depth of 200 to 300 feet deeper; this would enable the company to proceed with the development of their numerous lodes to advantage, whereas the blocks on payable ore would be ample to keep their mill profitably employed for years to come. All the properties on the line of this particular reef system are being vigorously developed.

The old Queen of Beauty, or what is now known as the Thames Hauraki Gold Mining Company, registered in London about January 20 last, are at present carrying preparatory works—viz, they have opened the collar of their shaft, and stripped and enlarged it down to a depth of four sets, or about 16 feet. These sets of timber are very massive, and have been placed in position as a guide to future operations, which will from now be conducted on the contract system. This company are to have the assistance of the Government in the sinking of this shaft down to a depth of 2000 feet. The Government will give £25,000 as a subsidy, which cannot be considered otherwise than a liberal offer on the part of those who govern the colony.

Eastward on the same line of reef the May Queen Extended are carrying out extensive works, and have a system of unexplored lodes trending throughout the whole length of their area. This property is over 60 acres in extent, and what I look upon as a very valuable area. Further to the eastward and on the same line of reef in the Karaka district, which in the past has produced a large quantity of gold, is a property known as the Manchester Special Claim; this and other properties have been amalgamated. I may mention here that in the early days of this gold field the majority of claims here were worked in very small areas, and in most instances with very satisfactory results, but now that the amalgamation of the most important—viz., Smith's, Karaka, Maypole, and others—has been effected, and in future they will be known as the Manchester. Its position is unequalled to catch the easterly trend of the May Queen reefs, and being a block of 100 acres in extent, while erected upon it is a 5 stamper battery, which has done good service in the past, and which has assisted Smith and party to produce fully £2000 worth of gold from their small section. What is really required is ample capital to develop the lodes, and if the present owners can acquire that, I have not the slightest doubt but what the mine could be made one of our principal gold producers.

During the 20th and 29th February, considerable delay has been occasioned in the Waihi Gold Mining Company's operations, owing to one of the boilers requiring repairs; this Mr. Barry, the company's manager, is attending to, and hopes to have everything in full swing almost immediately.

The Waihi Silverton Extended continue to raise a first-class ore averaging £8 per ton, which is of exceptional high value. Whether this will continue or not remains to be seen, still I am very sanguine that a payable ore will come to hand for a considerable time to come. The company's mill would have been started ere this, but some of the machinery has been delayed, and, as we have had an exceptional dry season, there is none too much water in the races to keep the mill in full work, but to-day, rain is falling steadily, and I am in hopes that the drought has broken up.

At the Waitekauri Gold Mining Company works the erection of the company's new mill is proceeding apace. The mine is being thoroughly developed, whilst the company's experimenting plant is kept continuously running on a portion of the general ore output, and the ore treated continues to maintain its high average. The mine is unquestionably a most valuable one, and promises to fully realise the expectations of the most sanguine. The Golden Cross ore lode continues to look well; as it is driven upon in Corbett's level the ore continues of the same excellent grade as heretofore. The lode, by the way, has already been proved to exist in this company's property for a length of over 2000 feet, and averages 20 feet in thickness, and in Corbett's level it is found trending even more than ever to the north-east, so that in another 1000 feet to 1200 feet it should strike into the Waitekauri amalgamated property, which consists of 400 acres, and includes the Nebraska, Anglear, Australian, and Marberg special claims. This is without exception a splendid collection of properties, and will be heard of to advantage in the near future.

The developments at the Waitekauri Jubilee Company have revealed a lode showing ore of exceptional richness; in appearance it resembles that class of ore won from the Main reef fully 18 years ago; it is thickly laminated with blue sulphides, and altogether presents a very rich appearance. A block of the ore is on view at the Bank of New Zealand at Paeroa, and is, without exception, a splendid specimen of general grade ore.

I intend visiting this district next week, and hope to forward you a detailed account of this discovery, and also the works in progress in other mines held by British capitalists, as they are just now of interest to home readers.

The New Zealand General Mining Syndicate have acquired two excellent properties in this part; they have taken up ground formerly known as the Taranaki, bounded on the west and south by the Waitekauri Gold Company; several large reefs have been unearthed, all of which are gold bearing; they intend to commence the development of these immediately, but at present they have let a contract to drive a crosscut a distance of 600 feet, with the object of intersecting the Waitekauri Gold Mining Company reef; this they estimate should be to hand in about 800 feet of driving.

This same company have acquired a splendid property between Preece's Proprietary and Aitken's Freehold in the Coromandel districts. In my next I hope to furnish you with a more descriptive account of the Coromandel gold field.

Kuaotunu.—The Kapai Vermont Company continue to turn out a splendid grade ore, and are now engaged driving a lower level to intersect their reef, from which they expect great things. The Try Fluke Company are steadily working on, and the lode continues to produce a fair grade ore. The Waihi Gold Mining Company are in full swing, and their works should reveal something of importance directly. Other mines are all in full operation without change of importance to chronicle.

At Coromandel, that rich producer of gold, the Hauraki have opened up their low level and intersected their reef, but no gold was seen at the point of intersection, which is out of the strike of rich ore. Driving along the course of the lode is now in progress, and this will be advanced forward to the rich shoot.

The other deep level mines are all raising gold ore, but nothing phenomenally rich has as yet been discovered. Of course, it must not be forgotten that their operations at the deep levels have only been recently commenced.

As I am closing my letter to catch the mail, *via* Sydney, the Phœnix Special Claim on the Whangamata are cleaning up a test parcel of 1 ton of general ore at the Thames School of Mines experimental plant. The return is not quite ready, but it is estimated to be worth fully £40 to £50 per ton.

NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS.—A general meeting of the members of the North of England Institute of Mining and Mechanical Engineers will be held in the Wood Memorial Hall, Newcastle-upon-Tyne, at 2 o'clock to-day, April 25.—Agenda: The secretary will read the minutes of the last general meeting, and report the proceedings of the council, election of members, &c, nomination of members, &c. The following papers will be open for discussion:—"Short History of the Jameson Coke Oven," by Mr. John Jameson. (*Trans. Fed. Inst.*, Vol. 10, page 350). "Report of the proceedings of the Flameless Explosives Committee," by Mr. A. C. Kayll, engineer. "Resistance of Air Currents in Mines," by Mr. T. L. Elwen. (*Trans. Fed. Inst.*, Vol. 10, page 62). The following papers will be read:—"Coal-cutting by Machinery," by Mr. William Blakemore. "A Compound Winding Engine," by Professor W. Galloway. A meeting of students and associates will be held immediately after the general meeting. The following paper will be read:—"Gas Producers and Gaseous Fuel and Illuminants," by Mr. Robert Martin.

MINERS' EIGHT HOURS' BILL.—On Tuesday afternoon a deputation, consisting of Sir Charles Dilke, Mr. Labouchere, Mr. Pickard, Mr. Jacoby, and Mr. T. Bayly, had an interview with Mr. Balfour, in order to urge that in any further appropriation of Parliamentary time by Government arrangements might be made to spare Wednesday, June 10, for which date the Miners' Eight Hours' Bill stands as first order. During the interview it became fairly clear that the Government would before that time propose to appropriate Wednesdays for business. Mr. Jacoby suggested that a Saturday sitting might be devoted to the Bill if the Wednesday could not be preserved.—Mr. Balfour, in reply, said he would consider the position of the Bill in which they were interested, but he was careful not to pledge himself in any way to provide facilities desired.

The list of applications for shares in the NEW ALBURNIA GOLD MINING COMPANY (LIMITED) closed at 4 p.m. on Tuesday, for both town and country.

REPORTS FROM THE MINES.

BRITISH MINES.

LEADHILLS.—W. H. Paull, April 20: Brown's vein. In the 160 fathom level driving north of Jeffrey's shaft the vein is now 4½ feet wide composed of spar, stone, and lead ore worth 25 cwts. of lead ore per fathom. In same level south of Wilson's shaft the vein continues unproductive, but shows more spar than of late. The stopes over this level are producing about their usual quantities of ore. No. 2 winze sinking below the 145 fathom level north of Jeffrey's shaft is in a vein 7 feet wide worth 25 cwts. of lead ore per fathom.—Raik and highwork veins. In crosscut east at the 100 fathom level the ground is cleaner and harder, shewing but little spar on the joints at present. In the 100 fathom level driving north of crosscut Raik vein is well mixed with spar and yielding good stones of ore, but not enough to value. In same level driving south the vein continues rather soft and poor.—Brown vein. The 100 fathom level driving west is in a vein 4½ feet wide composed of a kindly stone spar and lead ore worth to-day 10 to 12 cwts. per fathom with a good feeder of water coming from the forebreast. The various points of operation are without any change calling for remark thereon. Surface works are proceeding regularly. During the past weeks the flues at the smelting works have been cleaned, and about the usual quantities of fume obtained therefrom. Some repairs also done to the flues, and smelting resumed this morning.

COLONIAL, INDIAN, AND FOREIGN MINES.

YALGOO PUBLIC BATTERY AND GOLD.—The company's agents, Messrs. F. W. Prell and Co., Melbourne, report under date March 17:—The new main shaft has now reached water level, and Mr. Wynn is obliged to buy cut timber for the timbering of the same. This shaft will now be connected with the old works to provide ventilation and make ready for the stopping of the stone as soon as the machinery is in position. As you have doubtless been informed by our London house, Mr. Wynn has a very extensive experience as a mining engineer, holding certificates for every position from the lowest to the highest connected with mining, being especially good in all branches of gold mining. Mr. Wynn is of opinion that your mine is a thoroughly good property, and will pay well on a fair capital when thoroughly opened out. There will be no difficulty in getting sufficient water to keep the battery going.

PREECES POINT PROPRIETARY (HAURAKI).—Coromandel, March 9th 1896.—For the month ending March 7th the following is my report as to progress of the work.—Sinking Engine Shaft: During the month the shaft has been sunk 10 feet. From February 11th to the 27th no work was done in the shaft; the men being engaged in the Adit Levels and non-delivery of timber were the cause of this delay. On February 28th work was begun again in this direction, and good progress has been made. At a depth of 65 feet from the surface two bearers 10″ by 12″ were put in place, thus rendering all the timbering above them quite secure. This work finished, preparations were made to begin to cut the chamber, a work that will be proceeded with at the beginning of next week.—Driving cross-cut: On stopping work in the shaft, all the men were engaged in timbering and cleaning out the level, some of the old timber was in a remarkably good state of preservation, but here and there fresh sets were required. The road was cleaned up and in a good many places fresh rails were laid. At the present time the level is in a thoroughly good working condition. While this work was going on, the necessary survey was made previous to our beginning the cross-cut to hole to the shaft. At the same time the difference in level was taken between the collar of the shaft and the point of departure of the cross-cut from the adit level, the difference being 64 feet 5 inches. This work done, the driving of the cross-cut was immediately commenced, and at the present time we have gone 67 feet. On starting the work, we had three shifts of three men each working, but after recommencing work in the shaft only two shifts of two men each have been engaged here. The cross-cut is securely and well timbered throughout, and particular attention has been paid to the rise and direction, these of course being based on the result of survey.—Erection of Office and Surface Work: The erection of the office and rooms for Mine Manager has been carried on as rapidly as possible, and another week will see the building itself completed, leaving only the few inside fittings to be done. The bricklayer was engaged for four days in erecting the chimneys. The ground to be excavated for the erection of the machinery was marked off on the February 14, and since that date the work of excavation has gone on with little cessation, and at the present time it is all but completed. During the last day or two a carter with a team of two horses has been engaged in carting material for the concrete foundation. All the timber has been ordered, and as soon as other material arrives the putting in of the foundations for the machinery will be commenced. The prospector has not, so far, been able to discover any lodes on the eastern half of the property. The amount of surface covering and Marruka scrub renders this very slow and laborious. However, I think that with time and systematic search we shall be able to unearth the reefs that must undoubtedly run through this part of the claim.—(Signed) W. H. Argall, manager.

NEW HAURAKI GOLD PROPERTIES.—Coromandel, New Zealand, March 19, 1896: Report for the month ending 7th inst. and up to date—The rock the general character passed through this month in the "deep level crosscut," has been very compact and contrary for driving. Driven this month 49 feet 6 inches, total 385 feet 6 inches; and measures to-day 397 feet. At a point 337 feet, a reef 12 inches wide was intersected, which gave of a large feeder of water, and drained 17 feet of water from the south Tokatea winze, thus proving its connexion with the same, being linked to a floor therefrom, the reef a further drivage of two months ought to intersect the latter. The deep east and west level parallel to crosscut measured 126 feet, being 37 feet for the month, measurement to-day 141 feet. We are meeting constantly bunches of quartz, but very irregular and general bearing east of south. We are expecting to intersect the main reef here shortly. Nichols deep level crosscut is driven 101 feet mostly through hard country rock; the month's drivage was 46 feet, by 6 men; it measures to-day 114 feet. The rock is of a favourable character for gold, and all considered, good progress is being made. Since the 4th inst. a prospecting crosscut has been commenced in the new 14½ acre block. Distance driven 17 feet to-day, it measures 34 feet. This crosscut is being driven in line with the South Tokaten workings, and is in first-class country of yellowish sandstone, very highly mineralised. In all probability this crosscut will intersect the Queen reef, hence we purpose calling it Queen Reef crosscut in future. We purpose in a few days starting a new crosscut for prospecting purposes, the line and position of same being shown on plan being sent home this month, marked Green No. 1 in the 14½ acre block; although it is in line of approximate course of a large reef, I think it is still considerably further south; but from the Gully is the best site to get a level; we have chances of cutting other reefs, therefore we call it for the time prospecting crosscut. Our men in the bush have cut for the month: 1,750 slabs, 61 tegs, and 56 caps, getting timber to stock ere wet season sets in. The operations generally throughout the property are all on dead work at present, but a few months will, I hope, overcome this, and bring us in touch with reef developments, from which good discoveries ought to be made.—(Signed) Francis Hodge.

SUCCESS.—Coromandel, New Zealand, March 19, 1896: Report for the month ending 7th inst., and up to date.—The Big Reef Crosscut have been continued and driven or passed the rise 63 feet, we passed through the reef the part sunk on in the winze a strong body of flinty quartz. This crosscut measures to-day 278 feet. The end to-day is under the commencement of James crosscut above, only further east, to catch dip of shoots of gold easterly. So far as known, the rock is more charged with iron Oxide, and of a more favourable class than for some distance passed, though we are cutting chambers for two winzes to sink below James' level to go down to meet this crosscut, and they are not yet marked on the working plan now being forwarded by this post, but their positions are very near the rises put up above James level, unless water is too much for manual labour, we shall get these winzes well sunk by the time the deeper level come under them—this section of ground I look upon as very important in the future of the Mine—at this section.—James Level West: Here a band of Clay Formation beared the Reef somewhat northerly; we have, however, traced its course which is more so. We are more advanced, 160 feet from cross-cut to-day. We have risen and communicated to MacDonalds level from here, affording good ventilation and transit of stuff to our dumps; we have added a few tons of payable ore from MacDonalds this month, and opened a fair section of payable ground available for stamps. James East was driven for the month 16th feet, and in east of cross-cut 26½ feet; the hanging wall portion is gone off considerably to the south, and will probably prove the Success Intermediate reef; this is suspended for the present, and the men are preparing to sink a winze. James Intermediate Level No. 3 rise was risen nearly to surface and abandoned, and the men put to sink. A pair of men have cleared No. 2 Success reef, opened south 82 feet, where we found the reef split. Success No. 1 reef have also been cleared out to the forebreast. We have also hung Winze tackled on No. 2 Success reef, and are spilling through a stope for the purpose of extending a prospecting level northerly, believing the shoot of gold bed in the upper workings might have dipped faster than calculated on. We are working here at a depth about 40 feet, having a solar and five feet of water still undrained in the bottom of Winz. Bennett's level we have driven on a vein here from crosscut easterly 12 feet. The contractors are busy excavating for foundations of battery, and the road leading to same is likely to be finished in about four weeks' time. Machinery will then be carted on the site and erected at once. (Signed) Francis Hodge. P.S.—I am posting a working plan showing our principal workings. On the whole good progress is made, and we are opening up the mine to start as soon as the battery is ready.—F.H.

ARMADALE.—The following report has been received from Mr. Frank Nicolas, M.I.M.E, the company's consulting engineer :—You will be pleased to hear that the large amount of work done during the last two months has proved the lode, not only in length, but in depth. In No. 2 vertical shaft the lode was, as I anticipated, cut at 83 feet, and the drives along it at that level show it to be holding well. It is unnecessary for me to give a detailed report of the work, as Mr. Welch has, during my absence, sent home regular fortnightly reports, and as I enclose Mr. Vosper's report according to a cable received from you to Mr. Jenkins. From Mr. Vosper's report you will see that the mine is now past the region of a prospecting property, and has all the makings of a really big mine. I enclose the cablegram made out by Vosper.

BLAGROVES FREEHOLD.—Coromandel, near Auckland, N.Z., March 11: Report of work done in the mine for the four weeks ending 7th inst. During the month the engine shaft was sunk by nine men a further depth of 10 feet, making total of 200 feet. A chamber has also been excavated and crosscut driven east from the same a distance of 8 feet. The shaftmen were also employed in doing the other necessary work in the shaft. There is no change as yet in the country rock, it still being hard. The smith was engaged in making staples and glands for pole and catch wing, made and put shackles on to wire rope, also put same on drum of engine to change the bucket with greater facility and also other work as required about the mine. The carpenter put up coal hopper, fired pulley to poppet legs, made and placedl adders in position, made frame setts and other work. The surface men were employed in excavating ground and assisting smith and carpenter when needed. The machinery and pitworks are working well.—(Signed) W. H. Argall.

CHIAPAS.—Mining report for fortnight ending February 29: Santa Fé Hill, drift No. 3 driven 3 feet, total 188 feet; no change. San José drift driven 30 feet, total 30 feet; in quartzose rock showing trace of gold. This is the drift mentioned in last report driven on the free milling ore found in Santa Fé Hill drift, No. 3 crosscut. Francisco adit driven 25 feet, total 155 feet; in fair ore. Assay: Gold, 19 dwts. 12 grains; silver, 5 ounces 3 dwts. 12 grains; copper, 2·96 per cent. We are apparently nearing the footwall of the ore deposit, yet it continues to assay well. A new drift following the ore at right angles to this adit running about north-west. Providencia Aver, crosscut east driven 7 feet, total 68 feet; no change. We are contemplating to abandon this drift. Providencia crosscut east No. 1 driven 16 feet, total 306 feet; no change. San Juan extension rise risen 12 feet, total 38 feet; in very good ore. Francisco crosscut north-west driven 13 feet, total 48 feet; in poor ore. Assay: Gold, 3 dwts. 12 grains; silver, 4 ounces 13 dwts. 12 grains; copper, 1·42 per cent. This assay is according to the appearance of the ore too high. San Juan extension crosscut north-west driven 8 feet, total 44 feet. Still showing some ore. Taylor deep adit driven 20 feet, total 65 feet. Large boulders retard our progress. San Juan winze sunk 4 feet, total 4 feet. In fair ore. This winze is sunk on ore to communicate with Francisco adit. We are now making preparations to rise from below to meet this winze.—Extraction.—Old Providencia. Extracted 210 tons, broken from top of stope. Assay, gold, 1 ounce 11 dwts. 12 grains; silver, 20 ounces 8 dwts. 12 grains; copper, 9·50 per cent.—Santa Fé stope. Taken 17 tons to mill. Santa Fé stope west assays, gold, 5 dwts.; silver, 5 ounces 17 dwts.; copper, 2·57 per cent.—San Juan stope and drifts. Extracted 253 tons of good average ore. Assay, gold, 7 dwts.; silver, 7 ounces 14 dwts.; copper, 5·94 per cent.—Francisco adit. Extracted 123 tons of fair ore.

DUNDERBERG GOLD.—Extracts from manager's letter, April 5: —South Drift. There is a very decided improvement in the last week. There are 2½ feet of heavy clean sulphuret ore. It looks better than anything heretofore discovered, and, judging from appearances and former assays, it should assay in the neighbourhood of $100 per ton. The crosscut midway between the tunnel level and the surface is now in 40 feet, 26 feet of which is in the ledge, without any sign of the hanging wall. In the last 10 feet we have cut several small stringers and bunches of sulphuret ore, varying in width from a few inches to a foot. The west crosscut (main tunnel extended) is now in 113 feet from the turntable, we have cut through several small veins from 6 inches to 1 foot in width. The water still comes out of the face, which indicates that the main fissure is still ahead of us. Have discontinued work temporarily on account of being short handed. In compliance with your requests, I will have average samples taken, giving the width at the different points in the south drift—say, 20 feet apart. We have got a continuous vein in this drift 100 feet in length, varying in width from 18 inches to 4 feet. My lowest assay was $30, and the highest $80 per ton. So far, I have not taken any samples from the old stope, assuming the assays in the report to be correct. We have added 60 feet of good ore in the south drift and 25 feet in the north drift, and 12 feet in depth in the north winze.

GIBRALTAR CONSOLIDATED.—The mine manager's report to this company, dated Wednesday, March 11, states —Radcliffe shaft Since last report the sinking of this shaft has been at a standstill. Its depth now is 355 feet from the surface. At this level we started to cut a plat, which is now completed, and is a spacious chamber 12 feet wide. We also started a drive to the north at this level, which is now in 5 feet, also a drive to the south, which is in 5 feet. The size of the reef in both these is 2 feet thick.—230 feet level south. This drive is now in 180 feet from shaft; gone 10 feet since last report; reef 2½ feet big, of good quality stone. I have just started a winze in this drive at a distance from shaft of 133 feet.—230 feet level north. This drive is now in 147 feet from the shaft; gone 6 feet; 12 shifts lost from this drive. Appearance the same as in last report.—Crosscut to the east from 230 feet level north. This crosscut is now in 67 feet, and has been at a standstill since last report, pending arrival of air compressors and rock borers. At the end of this drive we intersected a channel running parallel with the reef in the level: be very likely country for a reef, but so far no new development.—160 feet level north. This drive has been at a standstill since last report in order not to interfere with the sinking of a winze in this drive to go through to the 230 feet level. This winze has been started at a point distant 150 feet north from shaft, and is now down 11 feet, the reef in which is 1 foot 8 inches thick, and is of good quality stone.—160 feet level south drive. Crosscut to the west off this drive is now in 76½ feet; gone 9½ feet since last report. Appearance of crosscut is unchanged. Nothing discovered yet.—40 feet level north. This level has been underhand stoped for a distance of 18 feet in length by 4 feet wide. Reef 4 feet thick, of poor or medium quality stone.—O'Brien shaft. This shaft is now down 133 feet, and has been sunk 7 feet since last report, which must be considered good work, as only one shift of men is employed here.—Perkins' shaft. This shaft is now down 52½ feet from point of commencement; gone 14 feet for a fortnight; no change as yet; same as last report.—Crosscut to east of uphill drive. This is now in 62½ feet from point of commencement, and has been extended 14 feet since last report; no change as yet; same as last report.—Shepherd's shaft. This shaft is now down 154 feet, and has gone 13 feet since last report; no change; same as last report.—Crosscut to the east of downhill drive. This is now 11½ feet from point of commencement, and has been extended 11½ feet since last report; no change as yet.

GREAT SOUTHERN TIN AND GOLD.—The mining manager reports:—Toora, March 14. There is not the slightest change for the better in the hardness of the rock in tunnel, and I am afraid it will continue the same to the end, but good progress is being made. The clearing of the line of race between the north end of tunnel and the dam across the river is proceeding very well; the contractors have completed one mine, so that there is ample length for commencement of the actual cutting of the race. The sawyers are making good progress with felling and converting timber for the flumes. Distance driven in tunnel (four weeks), 84 feet; total distance driven, 888 feet 6 inches.

KOMATA REEFS.—Waitekauri, near Auckland, N.Z., March 11: During the past month the various works have progressed as follows:—The crosscut from the Komata reef was extended 39 feet, making total distance 44 feet, through a very kindly class of country. Several quartz veins were met with, but of no value of consequence, and according to the plan we should intersect Argall's lode in about 20 feet more of driving. The main crosscut has been advanced 36½ feet, making total length 308 feet. During the month the ground has become very hard again, therefore the progress was slow, but a change of country may be encountered at any moment. According to plan we have over 100 feet yet to drive before we can cut Lavington's lode. This distance is more than was expected at first, but we were deceived, owing to the rough nature of the country, and at that time not having proper instruments to take the correct bearing. The drive on footwall of Argall's lode has been extended 13 feet. Owing to the large quantity of water coming from this big ore body, the progress has been retarded somewhat. The lode at present is split, there being a rib of mullock between the foot and hanging wall quartz. In another few feet of driving no doubt the mullock will cut out, and the lode become settled again, when it is intended to crosscut into the hanging wall, and again get test samples made throughout. The culvert has been completed a length of 90 feet to carry off the storm water from under the mullock tip. The sawyers turned out 2245 feet of sawn timber and also got mining timber from the bush. Tenders have been let for the construction of the water race. The contractors are working very well, making fair progress with earth work and the cutting of timber; no ditching or trestle work will be started until the rough surface ground is made. The surveyors are at work surveying the tramway route and the various other connections.—(Signed) W. H. Argall, general manager.

KAPANGA.—Coromandel, March 7: Report for the four weeks ending on the above date. During the month Larnach's shaft has been sunk 23 feet by 16 men. The rock passed through has every indication of being a gold bearing one, and it would not surprise me if we struck a reef at any moment, seeing the joints in country rock are full of quartz, carrying iron pyrites, which is a good indication. The shaft has reached a depth of 897 feet; after sinking a further depth of 10 feet, we propose cutting a chamber at the 900 feet level, and crosscut west, and in order to intersect the reefs cut in the 800 feet crosscut. We shall resume sinking as soon as the chamber is cut, and at the same time we can push on with the 900 crosscut; the shaft is timbered and divided with footways and ladder solars complete.—Rising above 800 crosscut on the Kapanga reef. This has been extended 18 feet by four men; the rise is 15 feet by 6. The country rock is very hard andesite, and the reef is 18 inches thick, composed of quartz and pug, carrying traces of gold. The country rock is showing signs of improvement.—Rising above 500 on Kapanga reef. This is extended 9 feet, and north stope of same measures 17 by 7, executed by two men. This reef is 4 feet thick, composed of solid quartz highly mineralised and carrying strong blotches of gold. We consider this an important point, as it is under the Coromandel shoot of gold.—Extending intermediate proper on Scotty's footwall. The drive has been close timbered, and extended 6 feet by 2 men. The reef at present is small, being only 6 inches thick. It is composed of pug or clay, mixed with country rock. Nothing calling for remark has been met with up to the present.—Edwards' drive on Scotty's hanging-wall portion, at the intermediate has been extended 8 feet by one man. The reef has considerably improved in the forebreast, letting out a large quantity of water. We have not cut through the reef yet, so cannot remark about its width, but if indications tell anything we ought to obtain some rich ore from this point.—Stoping above 420, on Kapanga reef. Stopes measured as follows:—First, 46 by 12; second, 14 by 6; third, 41 by 13; fourth, 10 by 5. The above work was executed by six men. During the stoping we occasionally saw rich stone, but in small quantities; still, the reef is looking well. It is 12 inches thick, composed of quartz and calcite, heavily charged with mineral.—Rising above Little Intermediate on Kapanga reef. This has been extended 11 feet by two men. The reef at present is small, but improving as we advance, and by this extension we are opening up a large block for stoping, from which we ought to get ore in payable quantities.—Driving north of Gunn's rise above 300, on Scotty's footwall portion. Drive has been extended 9 feet by one man; during the drivage the roof produced low grade ore. It is now holed to Moore's rise, which has given good ventilation to the workings.—Rising above the last mentioned drive. This rise has been extended 13 ft. by one man, during which the reef was well defined, carrying a good hanging-wall. It is 10 inches thick, composed of solid quartz and carrying a little gold. The stope north of the last mentioned rise measured 17 by 9, and produced ore of low grade. The 200 feet main drive on Kapanga reef has been extended 28 feet by two men; as yet nothing worthy of note has been met with. The reef is split up by a big s'ide, but in all probability it will improve as we get out of the broken country, and we hope soon to report good results from these operations.—Surface workings. The winze sunk below Cotters drive has been deepened 6 feet, and a drive put out south 11 feet by two men. The reef at bottom of winze is about 1 inch wide, carrying a little gold, but the country rock is very hard. In the drive south the reef has carried coarse gold, and our intention is to sink a new winze on the run of gold, the total depth of winze is 66 feet. The Kapanga reef must have changed its underlie otherwise the junction would have been reached before this. The Corby shaft has been cleaned up and sunk 6 feet, also chamber cleaned out and repaired for a distance of 50 feet; the crosscut is cleared to main drive on Kapanga reef, which is 4 inches wide, carrying good solid quartz. The progress has been rather slow in consequence of the large body of water with which we have had to contend, but now the way is clear. It is our intention to sink the Corby shaft as quickly as possible for about 30 feet and then drive a short cross-cut south-east in order to intersect the junction of Nos. 1 and 2 reefs. We have cleaned out the crosscut east at the 120 feet level, and repaired it, so that our way is clear to drive on No. 3 reef, and all other points that are likely to prove remunerative. All machinery and pitwork are working well. We crushed during the month 108 tons of ore, which gave 203 ounces of amalgam, yielding 67 ounces 16 dwts. of melted gold.—(Signed) W. H. Argall, Manager.

KATHLEEN GOLD.—Coromandel, New Zealand, March 20; Report of the mine since my last:—Hartridge's Shaft. This shaft is now 80 feet deep, all timbered to bottom, and in progress of sinking temporary steam appliances. A small double action pump lift is now being fixed to deal with the water separate, if possible, and use the kibbles solely for winding stuff. We shall test this in a few days, and if successful, we should make good speed in reaching our 150 feet for opening out. I had thought in my last that we had reached the bed rock; not so, however. We went through a decomposed rock formation and encountered changes since. Our first 10 feet passed through a yellowish clay, then 12 feet of gravel formation, 35 feet of yellow and blue clay, 7 feet through decayed wood, leaves Kauri gum, decomposed sandstone, and 16 feet of very fine blue clay formation, now in the bottom. I think this is leading us to the bed rock. We have had a very precarious piece of work, and if we had not taken the precaution and puddled with clay and an outer shaft we should have been beaten and lost our shaft. We have since my last put in another two sets of bearers and hung our sets of timber, and if, as I think we shall, reach the bed rock now, shortly we shall have a strong and permanent shaft. We have had several tests by panning and dish washing, which showed good prospects of coarse gold. A good feature to us is that a local company have discovered a rich reef, one of the Galconda reefs, which traverse our property close to our shaft, we shall crosscut to this at once on reaching the 150. The most important feature we desire now is to overtake the rock, as with this we shall cut through reef undoubtedly before reaching our desired 150 feet. We have now poppet heads fixed, a vertical and colonial boiler and steam winch at work, all under shed building, trestle work and top permanent brace all fixed. On reaching the 150 feet we shall sink well hole (say 25 feet), and then work a tangye pump while opening out and until our permanent plant is ready. My chief object is developing the mine without waiting erection of plant, and this, I think, we shall overcome. I am very favourably impressed with our new future.—(Signed) Francis Hodge.

MENZIES ALPHA LEASES.—The manager reports as follows, under date March 18:—New vertical shaft. Have sunk winze from south level a further depth of 5 feet, total 19 feet; reef averages about 6 inches; dish sample give result equal to 4 ounces per ton. Have driven the north level a further distance of 6 feet for nine days; ground still hard; reef small; dish sample 1 ounce per ton. —Crosscut at 60 feet level. Have driven this crosscut a further distance of 17 feet, total 108 feet. At a distance of about 95 feet from shaft we drove through a very nice formation about 2 feet 6 inches wide, well-defined, with good clean walls, and carrying about 8 inches of good stone. Gold plainly visible in stone. A first sample from the dump gave by dish results equal to 5 ounces per ton, while in the crosscut I could see good gold showing in the stone. This is a most important development, and I feel sure will open up well. We are still driving the crosscut with two shifts. I have taken the men out of the north level for this purpose. We should intersect other formation in about fortnight or three weeks. We shall start to drive on new formation (out at 95 feet in). The last stone hauled from new reef shows gold freely.—D shaft. West crosscut from this shaft has been driven a further distance of 11 feet in very promising looking formation, total driven 41 feet. May get change for better at any moment now.

ROCKY MOUNTAIN.—The manager, under date of April 7, reports:—The mill is still crowded with ore, and we have now a plentiful supply. We shall probably be running night shifts shortly. Owing to the improvements in the mill our capacity is considerably increased, and we are now putting through 45 tons a day on a single shift. The good work we are doing seems to have impressed the miners round about, and is going a long way towards settling any doubt as to our ore supply for the future. There seems every prospect of a good margin of profit for the month of April.

VICTORY (Charters Towers).—Copy mining manager's report for fortnight ending March 7:—No. 2 shaft. No. 7 level has been driven for the fortnight 7 feet, total length of this drive from bottom of underlie 301 feet, there is no change here to report. In the stopes and rise above No. 1A the reef is small, about 6 inches, fair quality, the walls are coming a little closer together, the formation here is much harder than it was and the reef smaller. The western drive at the 320 feet level has been driven a further 12 feet, present length of this drive from shaft to face 304 feet, the country we are driving in is still the same—viz., decomposed granite and diorite. There has been hauled from this shaft for the fortnight 15 tons, total at surface 35 tons.—No. 3 shaft. The underlie has been sunk a further 23 feet, present depth from straight shaft 182 feet. We have sunk a distance of 46 feet from where footwall turned over, the grade for this distance is about 550. We passed through 6 inches of formation about 7 feet from the present bottom, and there is 20 inches of formation, with small veins of white quartz through it, in the bottom of shaft. The country between the two formations is hard granite. We are boring out now, and the country we are boring in is a mixture of formation and hard granite. There has been nothing done in the drives for the reason it takes all our time to keep shaft clear and pump water. We have had very heavy rains, and we have a lot of water to contend with in this shaft, also in No. 1 shaft. On March 16 [the Sydney office received the following telegram from the mining manager at Charters Towers:—"Have struck formation in No. 3 shaft carrying quartz vein."

VICTORIA AND QUEEN.—Copy of manager's report, dated Charters Towers, March 3: No. 4 drive. Reef about 2 feet, very fair quality. Winze at end of No. 3 crosscut carries about 8 inches of very good stone. No. 3 drive has been driven 8 feet, with 1 foot of very fair quality stone. Reef in underhand stope averages about 18 inches, and in the back stopes about 15 inches of good quality. Reef in underhand stope of No. 2 level is about 1 foot, of heavy mineral stone. Hauled during the fortnight 120 tons, making a total of 125 tons in the paddock.

YERBAKONDA.—Fortnightly report of Captain M. Scantlebury, mine agent, dated April 1: South shaft. The 255 feet level south has been extended 21 feet, now 118 feet 6 inches from shaft. The lode is 4 feet wide, composed of quartz, assaying 7 dwts. of gold to the ton.—Winze below the 255 feet level south. Ground for fixing tackle has been cut out, and the winze sunk 10 feet. The quartz is over 6 feet wide, assaying 5 dwts. of gold to the ton. Trial shaft north-east of Beresford's has been sunk 19 feet, now 71 feet from surface. The lode is 2 feet wide, composed of quartz and decomposed mica schist, assaying 3 dwts. 18 grains of gold to the ton.

HAURAKI.—Coromandel, New Zealand, 18th March 1896. Report for the four weeks ending the 7th inst., and up to date.—The shaft has been completed to the 220 feet level, the chamber cut, and No. 2 reef driven on northwesterly 18 feet; the reef will average about 16 inches, but no gold seen. Our No. 1 winze below the 160 feet level is now very nearly as deep as our 220, and is, say, 60 feet north; this will be communicated at an early date; this said winze is not near so good as sunk through last month. I anticipate an improvement after passing under the winze, as it appears the heart of the shoot of gold is dipped through the winze and in that direction. We have driven south-east on No. 2 in the 220 feet 7 feet; the reef is small and disordered, and suspended for the present.—160 Foot [Level: We have risen in the back of the Iona crosscut and communicated with the winze sunk from a surface level, affording good ventilation for future developments from this point in this section of the Company's property. The crosscut will be pushed ahead in the same line, to intersect a masterly reef outcropping at surface, and running in the direction of Castle Rock; hence we have called it Castle Rock Reef. As far as we can judge we shall have 130 feet to drive. At a point passed through in driving the Iona Crosscut we met small pieces of quartz carrying visible gold, but cannot define the run of a reef. In this said crosscut throughout we have met several patches of quartz without being able to define any true walls—the country is much shattered. We have now placed a pair of men to search the spot where we met the colours of gold, and if successful in finding a reef we shall immediately develope it northwards as I have every reason to believe in that direction the Iona section of our property will be found valuable, speaking from general surface indications. No. 1 Reef 160 feet: This was driven on from the 160 Iona cross-cut north 24 feet, the reef is disordered and poor.—No. 1 Winze below 160 on No. 2 Reef: The reef held fairly good in this winze to a depth of 45 feet, width 6 inches, yielded good specimens and good gold ore, we are now nearly the depth of the 220 feet below the depth of 45 feet the reef only shows colours of free gold.—No. 2 Winze below 160 on No. 2 Reef: Since we drained the water this winze have been resumed sinking, we passed through a rich reef for 20 feet below the level, but in the bottom the reef is split in three branches and disordered, carrying occasional blotches of gold only; if the branches unite again in depth, no doubt the reef will assume its former value and produce rich specimens; the country rock so far is good, the reef so far as sunk through 30 feet has averaged 10 inches wide.—160 feet Level No. 2 Reef South: This was driven 12 feet 6 inches reef 5 inches and poor. 6 feet was also driven, and branch near the forebreast, and found poor; this seems to be a barren channel of country.—Crosscut East of No. 2, 160 feet level. The point of this crosscut is about 80 feet north of our shaft, and have passed through the New Year's Reef and No. 1 Reef; the former is very much disordered, and the latter about 8 inches wide, but no gold seen yet. The No. 1 Reef so far as wrot. on have been disappointing. We have driven on No. 1 Reef at the 100 feet north 20 feet, reef 5 inches and poor.—100 feet level: The reef cut in the crosscut near our boundary have been driven on 24 feet, total 82 feet; for the last 20 feet the reef have been poor and disordered. We purpose to call this in future the Iona Reef.—Iona Reef: In the stoping department throughout the mines, of which the coloured sections of each reef will go home by this mail, have produced during the past month a general better quality gold ore, which showed in our increase of returns. The stopes this past few days show a considerable falling off in value, and unless we meet improvements soon our returns will fall considerable this month. I hope they may improve again. We crushed for the past month 340 tons of quartz, and treated picked specimens raised 860 lbs. mill gave gold bullion 2,398 ounces 13 dwts. realising £7,336 10s. 10d. We are again sinking our shaft below the 220 feet, to go down for a 300 feet level, our progress will be slow for some time, having to fix bearers, cistern and plunger-lift to surface, from the bottom. With this done, however, we shall sink rapid, with a new draw lift. All works are being pushed on as fast as possible.—(Signed) Francis Hodge.

ALMADA AND TIRITO.—Report for the month ending March 28: Drivages. Ibarras tunnel has been extended 22·1 feet by four men; the total length being 391·6 feet. The lode is at present without ore, but is of an encouraging character. The lode in the 150 feet level driving south of Taylor's shaft is massive, and is yielding a little green ore. Owing to an increase of water, slow progress is being made; 9·7 feet having been driven during the month. Total length 146·2 feet. The 150 feet level driving north of Taylor's is opening up a splendid lode. It is 9 feet wide, and yielding 3 tons of ore assaying 38 ounces silver per ton per fathom. 13·5 feet were driven by four men; total length 119 8 feet. The lode in the 150 driving south of Wilde's shaft has improved slightly, but as yet does not yield ore in paying quantities. The drivage was extended 24·8 feet; total length 154·2 feet. The 150 feet level driving north of Wilde's shaft was extended 17·1 feet; total length 159·0 feet. The lode continues strong and well defined, and the favourable indications are maintained.—Shafts. Taylor's shaft was sunk 13 5 feet; total depth below the 150 being 33·3 feet. The lode contains very little ore, but it has a better appearance at present than for some time past. Wilde's shaft was sunk 11·2 feet; total depth below the 150, 19·8 feet. The lode is of a hard quartzose nature, yielding small quantities of black ore.—Stopes. The output from these has fallen off slightly.—John Nute.

GWANDA (Rhodesia) CONSOLIDATED.—The following information has been received from the manager of the company: New Claims. You will note that 40 new claims have been pegged on behalf of the company. 20 claims located up the Tuli River about 2½ miles from the Tuli River Reef Camp, and named the Emerald King. The formation is of rather soft slate in the block nearest the junction of the Tuli and Malami Rivers, whilst it becomes somewhat harder rising the hill through the second block. Each block contains a couple of old workings, which are rather small, not more than 4 feet deep, and 10 to 15 feet long, whilst there are in addition a couple more of a very small size, about enough to show a connecting line. I took samples from all the workings which carried gold to a prospect of 4, 5, 6, 8, and 10 dwts. to the ton. There is a little work done on the block nearest the junction—viz, a shaft sunk to a depth of 12 feet, which shows the old workings to be still unbottomed and exposing a lode of 2 feet in thickness, carrying a prospect of 6 to 8 dwts. to the ton, and a small cutting which shows the same lode to be extending on the surface though narrow to carry gold to the extent of about 10 dwts. On the whole I can say that this property is worth prospecting as the formation is not hard (on the surface at least) and operations may not prove expensive. About 4½ miles down the river are located 30 claims containing six or seven old workings, one of which is about 30 yards long and 46 feet deep. The samples from here are richer than any of the other workings, prospecting 10 dwts., whilst the other workings I take to be 4, 2, and 4 dwts. to the ton, and traces of gold from two more. I think that from the position of the workings, 30 claims are too many to be located as the extent of the line could easily take in 20 claims or two blocks. Were it not for the old working before mentioned I would not trouble much about the remainder, as I fancy that the leads, judging from the regular line about the old dumps, must have been very narrow, whilst there are indications of the lode being large in the long working. I made an offer to the locators for the Emerald King for 20 of these 30 claims, which was accepted. Prospecting operations on these blocks will be started as soon as we can spare boys. Our trouble with boys is not yet at an end, but still I hope that within this month labour will become more plentiful, as boys will not be required on the fields after the crops have been gathered. —Work done. Umtchabese reef, shaft 1. Total depth to date 61 feet. An old working has been cut in shaft on the dip. No sign of the bottom. The water is somewhat lessening. The shaft will have to be timbered before we can sink further. Average size of the reef 18 inches.—Shaft No. 2, drive 1. We have driven 3 feet crosscut.—Shaft No. 3. Total sunk to date 98 feet. I have commenced to crosscut, and ascertained the width of the reef at this level.—Lady reef, drive No. 1. Total driven to date 25 feet in the crosscut.—Tuli River reef, shaft No. 2. Total depth to date, 32½ feet. Average size of the reef 17 feet. Shaft No. 3, 1 drive. Total driven to date 39 feet.

GREAT BUNINYONG.—Manager's report, dated Ballarat, March 16:—Great Buninyong Estate. Contractors for erection of machinery at alluvial shaft anticipate completion at the close of the week, and will, subject to engineer's certificate, be released on Monday next. At the quartz shaft repairs have been effected, and all is in good working order to a depth of 130 feet. The water is well under control, and soundings have been taken to a depth of 333 feet, resulting in proof being obtained that the shaft to that depth is not seriously defective.

GREAT BOULDER PERSEVERANCE.—Mine report for fortnight ended March 13: No. 3 (main) shaft. This has been timbered, centered, and brace fixed during the fortnight. The ladder road has also been put in. No. 4 shaft sunk further 2 feet and timbered for 30 feet. No. 7 shaft sunk 9 feet 3 inches, making total depth 75 feet 3 inches. At this depth a change took place, and we are now sinking on ironstone mixed with quartz. We intended to open out at this level, but owing to the change shall sink to a depth of 80 feet, and then open out the crosscut.—(Signed) James Kearman.

HANNAN'S STAR.—Advices from the mines superintendent under date March 14 state: Main shaft. The south drive has been extended to a total distance of 20 feet from crosscut. The lode is in very tight ground and is opening out a little. It carries a little gold by dollying and dish washing, and has every appearance of improving going south.—James shaft. Eastern crosscut extended to a distance of 16 feet from shaft. The ground is very hard diorite. I shall stop this and let another contract to drive 100 feet west—*i.e.*, to continue western crosscut.—West shaft. The winze has been sunk to a total depth of 63 feet from 52 feet crosscut. I expect to hole through to the 112 feet crosscut next week. We are now sinking in very hard diorite, and no sign of any stone or formation, and, therefore, what we have in the 52 crosscut does not continue down. This has been proved by sinking down through the formation.

MOUNT ZEEHAN (Tasmania) SILVER LEAD.—Manager reports for week ended March 10: Silver Queen section, No. 8 lode, No. 2 level. Winze on south-west part of lode has been sunk 6 feet, total 29 feet. In taking down the lode we found it not so productive as previously, the shoot of first-class ore now being only 2 inches, but this is only temporary.—Tributes. Prospects of tributers at Argent No. 2 section are very good. Balstrup tributers are doing fairly well, their output last week having realised £260.

MURCHISON UNITED.—Under date March 9 the mine superintendent reports:—Lily vertical shaft sunk to a total depth of 192 feet. I have started at 191 feet to crosscut for the reef. While pump is up out of the way clear from face stots I shall cut in for a fortnight, then lower pump, and put in a week's work on sump. The granite keeping so hard, I would not wait to make it the exact 200 feet vertical, and it gives no more than that underlay on reef. As after two days only two men will be able to work in the face at a time three shifts, I shall make up two shifts, and continue the old winze, sticking to the reef all the time.

QUEEN CROSS REEF.—Copy manager's report, dated Charters Towers, March 3: Underlie shaft sunk further 14 feet, with 2 feet 6 inches, good quality stone in the sink. Winze sunk further 12 feet, reef 2 feet, good quality. The stone in the stopes behind the shaft keeps about the same as last report. Quantity of stone raised for the fortnight 70 tons, making a total of 190 tons in the paddock.

ROYAL SOVEREIGN.—The manager reports, under date of March 15, as follows:—The western crosscut has been driven 26 feet 6 inches, making total 107 feet. This drive is looking well, having several nice veins of quartz in the face. Eastern crosscut has been driven 28 feet 6 inches, making total 97 feet 6 inches, several nice looking quartz veins having been passed through, one being 1 foot wide. I intend sinking a winze on this latter in order to prove it at depth. In the No. 2 western shaft the reef has made a distinct turn to the west, and I intend to follow it. There is a strong body of quartz about 3 feet 6 inches wide, carrying some very fine gold. It is my opinion that the several quartz veins that have been passed through in the main shaft will make into one large body of stone at depth.

RHODESIA.—The following information has been received from the manager, who wrote from Buluwayo on March 16:—Farms. I send you herewith a cutting from Saturday's paper with a survey notice of 13 farms. The survey itself will be taken in hand as soon as possible, and thus beacons secured. Three farms, whose beacons were originally so very vaguely described that I could not possibly locate them, have been located (by the good services of our surveyors and the courtesy of the Land Office) so as to adjoin Glass's block, giving us in that district almost a solid block of 15 farms. On the west we shall be only 1 mile from the Tuli road, and the block stretches to the east as far as the Insize, a distance of 22 miles. The land wedging in from the south may also become open if the farm rights claimed to cover this land should not be found sufficiently large, and I shall then try to locate other farm rights in that angle. There is a very large quantity of first-class mining timber on this block, and as I was informed that they were cutting timber there I have appointed a Mr. Pingelley, the owner of an adjoining farm, caretaker of this block, with instructions to prevent anyone from cutting unless previously a price for timber was arranged. I am also putting a notice in the papers warning people from cutting timber and shooting. A large number of claims being pegged and partially worked on the north-eastern portion of this block, it will eventually be necessary to appoint a special caretaker, and the revenue derived from the timber will be large enough to warrant this extra expenditure. Amongst the farm rights covering Glass's block, I found one belonging, or having belonged, to the estate of a certain L. Dewis. I happened to know that this L. Dewis was one of Wilson's party, and killed on the Shangani. Farm rights granted to the estates of all men killed in action carry the right to peg at any time, either on the gold belt, coal area, or native timber, which are otherwise proclaimed. I immediately took steps to withdraw said right, and I am glad to say I succeeded in doing so by substituting another of our farm rights, which is likely to be cut out on survey. This "Deceased Man's Right," as they are called, is very valuable; and I hope I will, by the advice of the surveyor, be able to locate it on one or the other gold belt, where many claims are pegged.—Criterion. By this time you are in receipt of my letter giving ideas about the way in which I propose to deal with the 40 claims originally in this property. I send you herewith a fresh sketch plan of the reefs. You will understand why I should like to do more development first on the extensions, as it will prove that I have a longer run of reefs on these than on the original blocks. This Criterion is a perfect network of reefs, and from outcrops alone it was impossible to judge the run of the lodes. I have given instructions to pick up the reefs in these extensions, and if successful in finding them rich, I can safely take an engineer out to report on each portion separately. The stoppage of transport is putting everything out of gear and I do not know how I will keep the various camps supplied. However, as stated before, I will do my best. The following is a note of the work done on the property to date:—No. 3 shaft. Sunk during the fortnight 7 feet, total to date 64. West drive driven during fortnight 6 feet, total 35, average size of the reef 28 inches. East drive driven during fortnight 26 feet, total to date 70 feet, average size of the reef 28 inches.—Shaft No. 4, west drive. Driven during the fortnight 5 feet, total 57 feet, average size of the reef 24 inches. East drive driven during fortnight 8 feet, total to date 192 feet. No sinking has been done here this fortnight; we have been pumping steadily since the last report, and have only now managed to get ahead of the water. Water is rising, and will, I am afraid, seriously hinder the sinking. The average size of the reef is 24 inches.—Shaft No. 7. Sunk during fortnight 15 feet, total to date 25 feet.—Shaft No. 8. Sunk during fortnight 20 feet, total 30 feet.

SCOTTISH WESTRALIA.—Golden Pig Extended (Southern Cross): The report to hand by last mail from the manager states—The main shaft is now down 65 feet. The other shaft is now secure. I have let a contract to sink it 50 feet, and this will bring both shafts 30 feet below water level. The western lode will be cut in both shafts in six weeks' time if the country does not get extra hard, so that we will be able to show the lode 30 feet lower than the Golden Pig. The eastern lode can then be cut.

SUNBEAM AND VIGILANT.—On the leases known as Sunbeam, Sunbeam North, Sunbeam Extended, Vigilant, and Vigilant North, I am sinking prospecting shafts 5 feet 6 inches by 3 feet 6 inches, within timber. These shafts are being sunk off the reefs, most of which are now down 15 feet timbered, windlasses and braces erected, and when we reach the 60 feet level, we shall crosscut and open on the reefs. In this class of country I prefer sinking off the reefs and cutting them lower down, it being much the quicker and cheaper method of prospecting and proving the reefs, and when proved, the winding shafts can be sunk at any time. Until these prospecting shafts are sunk to the 60 feet level, and we commence crosscutting towards the reef, there will not likely be anything of particular moment to report unless any gold bearing leaders cross the shafts making into the reef. Sunbeam East. This shaft is sunk 45 feet, and when sunk another 15 feet we shall crosscut and open on this reef, which has a strong outcrop and is easily traceable through the lease.—Vigilant Extended. On this lease I am sinking a water shaft in the bed of a creek. This shaft is 7 feet 6 inches by 3 feet 6 inches in the clear, which will allow sufficient room for hauling water either by a whip whim or winch. I expect to cut water under 100 feet, and a good supply at 200 feet. The ground broken and raised from this shaft will be so placed as to form an embankment or dam for the conservation of storm water in the creek, which latter evidently carries away large bodies of water after the rains. We have also cut a bywash for the surplus water, so that it will not interfere with the shaft. On all these leases I am pushing forward with the sinking, and now that the preliminary work has been done progress will proceed rapidly.—H. Ley Hancock, acting and mine manager.

SUNBURST.—The mine manager sends the following report:—Old shaft. This party has 5 tons of fair looking stone on top. The reef will average 5 inches with them at present in the stopes over No. 2 level.—Sunburst. The contractors have driven 6 feet in the crosscut, total distance driven 71 feet. A fresh contract was let during the fortnight to drive the crosscut 50 feet, with two shifts of two men in a shift at £2 10s. per foot. The ground is hard to bore. I tested the boiler up to 120 lbs. to the square inch, and found it stood the test all right without showing any leakage.—No. 2 west level. No. 5 block in section 233 is let to a party of two men.

TRUE BLUE (Hannan's).—Mine manager's report for the fortnight ending March 17:—No. 1 main shaft. The north-east crosscut has been extended a further distance of 20 feet, making total distance from shaft 104 feet. Several small leaders have been cut through.—South drive. At a distance of 28 feet from shaft in north-east crosscut I commenced driving south on the leaders, followed down in the winze, and extended the drive 11 feet from the crosscut, and holed through to the winze. After the timber work is finished, and ladder road fixed in position, I shall continue this drive south on the leader, which, being the first lode opened in the mine, and followed down from the surface to the 100 feet level, will be known in future reports as No. 1 lode.—South-west crosscut. The south-west crosscut has been extended 55 feet, making total distance driven in this direction of 130 feet. At a distance of 127 feet from the shaft a formation 3 feet in thickness was cut through.—Shaft A. This shaft has been sunk a further depth of 5 feet, total depth from brace 65 feet. The ground continues hard, and difficult to work.—Jubilee section. Jubilee shaft. The south-west crosscut at the 100 feet level has been extended 18 feet, total length 50 feet,—Intermediate level. I continued intermediate level, commenced some time ago, and drifted a distance of 8 feet, and holed through to the prospecting shaft sunk below the old surface trench. I next put up drives and holed through to the bottom of the trench, and shall next week commence the stoping out of this block.—Shaft B. The north drive on the Jubilee reef has been extended a further distance of 19 feet, total distance driven from crosscut 33 feet. Four prospecting cuts have been cut through the lode and formation at different points. Crosscut north-east has been commenced from this shaft.—General. A total of 175 lineal feet of underground workings have been completed for the fortnight. Contracts for extending south-west crosscut at Jubilee shaft a further 50 feet has been let at £2 4s. 6d. per foot, and for driving north-east crosscut 50 feet from shaft at 19s. 6d. per foot.

TARARU CREEK.—Thames, March 14: Report on the work done in the mine during the four weeks ending March 14:—Norfolk section. Good progress has been made with opening up the block above the intermediate level on the California reef. The passes have been put in, and a leading stope has been carried along a distance of 85 feet. The reef here varies from 1 foot to 6 feet in thickness, is heavily mineralised, and gives fair dish prospects. The low level on the same reef has been extended 17 feet, making the total distance driven from the rise 266 feet. The reef in the face is divided into two ribs, the hanging wall portion shows galena and other minerals, but no gold is visible in the stone. Work here has been discountinued for the present, and a rise started 130 feet back from the face for the purpose of draining and ventilating the workings. This rise is now up a height of 45 feet. The reef which is 4 feet in width, is of a soft rubbly nature, and gives good prospects of free gold in the dish. The company will have a very extensive block to work out here, fully 90 feet of backs are available between the two levels. I thought it advisable to stop this rise, as we cut a very large stream of water, and have started to sink a winze from the intermediate to connect with the rise. This winze is down a depth of 19 feet. We are carrying with us about 4 feet of the reef, and there is no appearance of either wall. The ore from the bottom of the winze is very similar to that which we had in the intermediate level. A second rise has been started 40 feet east of the first, and is now up a height of 13 feet. No quartz has been broken out here yet. The Missouri main crosscut has advanced 43 feet, making the total distance driven from the California reef 248 feet. A small leader about 6 inches in thickness has been passed through, but otherwise there is no change to report.—Dune din section. The present low level on the Day Dawn reef has been extended a further distance of 8 feet, making the total distance driven on the line of reef 218 feet. Gold is still freely seen through the hanging wall vein. About 154 lbs. of stone showing gold has been saved for special treatment, and the reef in the face continues to look well. The tributers' level on the same reef has been carried forward 17 feet, making the total distance driven on the line of reef 225 feet. There is every appearance of an improvement coming in the face. The country we are now penetrating is all that could be desired. The reef has opened to fully 3 feet in thickness, and looks very promising. Two stopes are in progress over this level No. 4 is along 60 feet, and No. 5 10 feet. The reef in these stopes averages 3 feet in width, and a little gold is frequently seen. A rise of 76 feet in height has been put up to the surface, for the purpose of ventilation and getting filling in for the stopes. The distance driven on the parallel lode is 33 feet. The reef varies from 6 inches to 2 feet in width, and the assay value from picked stone is £11 10s. 6d. per ton. The intermediate under the tributer's level has advanced 19 feet east and 17 feet west, making the total distance driven 90 feet. The reef in these faces averages 2 feet 6 inches in thickness, and is still heavily mineralised. Two stopes are being carried along over this level east of the winze. The leading stope is along 25 feet, and the second 10 feet. The ore coming from this block is carrying good minerals and by dish process gives fair prospects of free gold. The City of Dunedin low level has been extended 37 feet, making the total distance driven on the reef at this level 440 feet. The reef is 8 feet in thickness, but the ore is of low grade. The crosscut to intersect the California reef in this section has advanced a further distance of 40 feet, making the total distance driven from the City of Dunedin reef 102 feet. At present we are passing through a network of quartz, and the reef should be to hand at any shift. Good headway has been made with the battery tunnel; 350 feet has been repaired during the past four weeks, the total distance now in good order being 1200 feet. I regret to say the water is still very short for battery purposes. We are only able to work 10 head stampers at about 46 blows per minute. The total amount of amalgam on hand is 149 ounces 8 dwts.—(Signed) W. H. Argall, manager.

WOODSTOCK (New Zealand).—The mine manager, under date March 18, reports as follows:—The exceptionally dry season here is a splendid test of the water supply available for motive power in the Ohinemuri and Waitawheta rivers. As you are aware, these streams form a junction at our mill site, and at the present moment the water running to waste therein is sufficient to drive 200 head of stampers with a fall of 30 feet. On the Ohinemuri you have the first right to water. With a view to the further extension of the new plant I would suggest that we utilize the Waitawheta river, ours being the second right on that stream. The prior one, belonging to the Talisman, is for 10 sluice heads only. On this stream a water race 20 chains long would give 26 feet fall at the mill, and the best of the material in the old water race could be used for fluming purposes.—Maria lode, No. 1 level. This section of the mine was opened up by the original owners 13 years ago, but as there was no capital to provide improved appliances for ore treatment, operations were suspended. We have now cleared up the crosscut 182 feet in length, and the level to north for 90 feet retimbered where necessary, and laid down a permanent train line. The lode for the whole 270 feet driven ranges from 3 to 16 feet thick, and 30 tons grassed assays £3 12s. per ton. So far as one can judge, there is an abundance of ore in sight, and the block, which is almost intact to the surface (about 70 feet), is opened up ready for stoping. Beneath this level a winze has been sunk 25 feet, and we have now two shifts preparing for sinking on the lode in the direction of No. 2 level 280 feet lower down. No. 2 level has been driven 31 feet by contract, and I intend letting a contract for 100 feet more. No. 3 level has been extended 21 feet along the lode, which is being broken out to an average width of 5 feet without any sign of the hanging wall. The value of the ore is about £3 per ton. Here we may at any moment strike the channel of soft country which accompanies the lode in No. 1 level, and then I am confident we shall meet with rich ore. No. 4 level has been driven 54 feet, the last 30 feet being on the lode, which varies from 4 to 5 feet thick, and carries a high percentage of bullion throughout. When the lode was met with here about three weeks ago the first sample gave an average assay value of £13, and I telegraphed results, but we have still got 26 feet to drive to reach under the point where the richest ore was met with in No. 3. The ore body is friable, easy to break, contains more free gold than in the upper workings, and has its course through comparatively soft country. No. 5 level crosscut has been extended 63 feet, and another 40 feet should bring it up to the Maria lode, where I expect to meet with the downward continuation of the rich ore left underfoot in No. 3.—Woodstock lode. The crosscut from No. 2 level is now in 90 feet, and yesterday a lode 3 feet thick was intersected, but nothing definite will be known about its size and value till we commence driving on it. This crosscut is penetrating a splendid class of country for the existence of gold in remunerative quantities.—Stoping. As our storage hoppers will not be equal to holding the ore that will be broken from the different levels while the erection of the new mill is in progress, we cannot do any stoping pending the completion of the plant.—New mill. The contractor has completed a suspension bridge across the Ohinemuri River for conveying materials from the road to the mill site. The blocks and ground plates are in position, and fair progress is being made with excavations, &c. During the 20 days' run to March 16 272 tons of ore chiefly from Maria lode were treated, the bulk assaying £5 14s. per ton. It will take another week to complete its treatment, after which we will have a final clean up, and bullion results will be forwarded as soon as possible.

DOLLAR.—The following is extract from mine manager's report, dated March 13:—Dollar main working shaft 66 feet, timbering 56 feet, L.S.D. 89 feet, good grade ore equal to 2 ounces per ton. Dollar No. 1 shaft completed working preparatory to timbering. This shaft has supplied fresh water for the whole district.

AUSTRALIAN BROKEN HILL CONSOLS.—The mining manager reports by mail for the fortnight ended March 12, as follows:—Block 96, 280 level east, No. 3 rise, driven 8 feet, total 93 feet. No change.—Incline. West stopes driven 6 feet 6 inches. Lode has pinched very small. No. 6 level east driven 8 feet. Lode is widening, showing galena in carbonate of iron. No. 5 level east driven 7 feet, total 323 feet. No change. Galena has been met with. Operations here have been suspended. No. 4 level east, No. 1 rise, east stopes driven 7 feet 6 inches. West stopes driven 9 feet. Stoping continued. The lode formation in both faces is widening, consisting of several veins of carbonate of iron and calcite. A little galena, associated with fahlerz, has been raised. No. 2 level west driven 14 feet. Prospects not being encouraging, men have been transferred to explore same level east of incline.—Note. The quantity of rock mined during this fortnight was 2256 cubic feet.

BALAGHAT MYSORE.—Thomas Richards: Report for the ortnight ending March 28:—Ogle's shaft. The 270 feet level south from the crosscut east near south shaft has been driven 22 feet, total distance 65 feet 6 inches. The quartz, 1 inch wide, is of no assay value.—Haines' shaft. The 410 feet level north crosscut east has been extended 2 feet 6 inches, total distance 68 feet 6 inches. No change.

BIRTHDAY AMALGAMATED OF WESTERN AUSTRALIA.—The following are extracts from the manager's report, received on the 4th inst., dated:—"Day Dawn, February 17. Work done during fortnight: Lease 792. Shaft sunk further depth of 10 feet; present depth from brace 56 feet, the last 24 feet of this shaft through the reef. There is no sign of the footwall yet. Gold can be seen at times in the stone. I will start two shifts in this shaft this week, and get down to water level as speedily as possible. On lease 455, No. 2 shaft (the shaft that the prospectors got gold from), have put in roadway to bottom of shaft, and started to drive north to see if rich shoot of stone goes down. I am expecting the Inspector of Mines here this week to examine the mine." Extract from letter dated February 21:—"When the Inspector of Mines was here yesterday he spoke very highly of lease 792, and advised thorough development. He considered that in this lease we have a property with prospects second to very few, and better than some of the so-called big mines of this district."

BREMNAES.—The following report has been received from the manager (Mr. Daw), dated Haugesund, April 16: It will be seen that there is very little alteration to note in either of the mines, excepting in the 100 feet level south in Risvig Mine, where we have a very fine lode. Several of our miners have left, as the harbour authorities are offering work during the summer months, for which the men receive a higher wage than at the mines. This has caused us to somewhat alter the arrangement of the men. Miners are, however, very plentiful, so that we shall soon be able to fill their places.—Risvig Mine, 400 feet level. Since the connection with the winze from the level above this level has been stopped, and the men put to stope in back of level. In the end the lode is disturbed, owing to a depression in the strata. In the stopes the lode is 4 feet 6 inches wide, whereof 10 inches is quartz well impregnated with iron and copper pyrites, and a little galena, in which specks with visible gold are occasionally seen. The rise in back of same level shows about the same quantity of quartz, and is of about the same value.—300 feet level. Lode 5 feet wide, containing strings of quartz only. It is our pioneer level, hence we hope it will soon improve. We shall push it ahead as fast as circumstances permit.—Rise and stope in back of level. The quartz varies from 6 to 8 inches, but is slightly mixed with country rock. As, however, it is just above where the good stuff was found in the level, we think it will soon improve.—200 feet level. Lode about 4 feet 6 inches wide, with a little quartz on the footwall. We have been expecting an improvement here for some time, and, judging from appearances yesterday, we think we shall soon be able to report that we are in good milling stuff again.—100 feet level south. Lode 5 feet wide, of which one-half is quartz, and assays 6 dwts. to the ton. We are also crosscutting from this level to another lode about 8 metres distant.—80 feet level. There is a slight change in the character of the rock, and by the end of this month we shall be able to crosscut to pick up the lode. No alteration to note elsewhere.—Gapleskog Mine. Bottom level north shows a lode 4 feet 6 inches wide, containing bunches of quartz in which we find the usual associated minerals and some visible gold. We have passed under the first sink sunk by the old company, which is beyond and over the lode. In a week or two we think we shall cut into the cross lode cut through in the upper level by the old company. As soon as this is done we shall be able to stope on a large section of ground. The rise and new stope in back of upper level show about 8 inches of quartz of usual quality. We have had to take some of the men away from these workings to fill up vacancies in the other mines.—Fladenes Mine. The men are making fair headway with the level from shaft to sink. We have stopped the sinking of the sink until the men in the level strike on the lode, so as to guide us in picking up the lode from this point. In the meantime the men are stoping and driving a couple of intermediate levels. The quartz is 4 feet wide, carrying a good deal of iron and copper pyrites and some galena. We hope to strike on some coarse gold with these workings north of shaft; we are extending the level worked by old company. The lode is 5 feet wide, of which 18 inches is quartz similar in value to that in the sink. We shall also begin on some new stopes as soon as miners come around.—Surface department. All the machinery is working well, and the sorted quartz from the different lodes is being milled separately. We shall clean up at the end of the month and mail results.

BIG BLOW.—Report received from Mr. W. M. Vivian, mines manager, dated March 18: Battery. Since writing you last week I started the five stamp mill on Friday, the 13th. That day and the next were mostly occupied in altering some of the minor details of the mill and engine. Everything is now working smoothly, our only difficulty being the want of water. The quartz which we are breaking out is looking very good, a lot of it showing visible gold, and it is disheartening to think we have not water to treat it. I am confident that when this difficulty is solved the company will enter upon a prosperous dividend paying career.

BAYLEY'S REWARD CLAIM.—Mining report dated Coolgardie, March 2: The following is report of work done for fortnight ending February 29; Everard shaft. The south drive from bottom of this shaft has been driven 20 feet, total 50 feet. Lode at present 18 inches wide; no gold visible.—Air shaft. This shaft has been sunk 6 feet. The lode shows in the north end of the shaft for a width of about 14 inches. Have also driven south from the bottom a distance of 14 feet. Face now in clean country.—(Signed) Tom V. Browne.

BAYLEY'S REWARD No. 1 SOUTH.—Mining report, dated Coolgardie, March 2: Work done for fortnight ending February 29 is as follows:—170 feet level. At this level we have extended the north drive 9 feet for fortnight, total 99 feet from shaft. The lode has pinched in the face, and so far we have seen no free gold during working. We have stopped this drive for the present, and are now stoping north of rise. The reef here is 2 feet wide and very difficult to work.—Intermediate level (between levels 120 and 170). This level has been driven from the rise south and connected with winze from 120. We are now stoping backs of same, and during the last few days have taken out some extremely rich stone.—90 feet level. The winze 66 feet south of main shaft in this level has been sunk (by two men only) 6 feet for fortnight, total depth 16 feet. The reef is here 2 feet 6 inches wide in bottom and shows a tendency to widen with depth. The stone is payable and will be stoped as soon as sufficiently up. Drive south of this level beyond whip-shaft has been extended for fortnight 18 feet. The face is in soft ground carrying stringers of quartz. We are driving to connect with prospecting shaft south again, now 50 feet deep. The progress in this shaft will be rapid as this 50 feet represents two men's work for 12 days. The ground is easy sinking.—Battery. We have crushed 60 tons of highly payable ore for fortnight, also two small lots of parcel work, 5 and 10 ton lots.—(Signed) Tom V. Browne.

BRITISH BROKEN HILL.—Mining manager's report for the week ending March 11: Main workings. A good supply of ore has been obtained from the far north stopes, and eastern vein in southern part of the mine. The various working faces are all looking well, and opening good grade ore. All ore mined during the week was dumped on reserve piles on surface. The contractors working above the 100 feet level mined 89 tons of ore averaging 48 per cent. lead and 5 ounces silver per ton, and those working below the same level broke 78½ tons of ore averaging 45 per cent. lead and 5 ounces silver per ton.—Howell shaft. We hoisted 130 tons carbonates from far north stopes. Part of this was obtained in cleaning up the reserve lying around ore chute, and assayed 44 per cent. lead and 5 ounces silver, the remainder was obtained from 10th and 11th floors, and averaged 38 per cent. lead and 2½ ounces silver per ton.—Surface. Everything proceeding very satisfactorily with erection of jig plant. The large engine has just arrived, and will be placed in position with all possible dispatch.—Ore shipments. No ore shipped from mine during week, but assays of following (three) lots have been agreed with Block 14 Company, Port Adelaide, from previous deliveries—viz, 167½ tons (net) containing 29 tons lead and 5303 ounces of silver.—Week's assays. Carbonates, lead from 32 to 52·5 per cent., and silver 1·6 to 12·9 ounces per ton.

CRESCENT.—Fortnightly report of superintendent, dated March 13: Crescent Mine. Tunnel B towards main shoot extended 18 feet, total 417 feet. We have passed through a compact lode, 4 feet wide, and in which colours of gold are obtainable, and reached the main hanging wall. This is evidently the Crescent lode, and we shall forthwith commence to drive north towards main shoot.—Victory Mine. Drive north of Tunnel E on Neill's lode advanced 29 feet, total 153 feet. Lode formation 6 feet wide, but poor. South drive at same level advanced 27 feet, total 118 feet. The lode is also poor at this end. Extension of Tunnel E towards western lode advanced 22 feet, total 208 feet. Ground much easier for working. Passed through a number of quartz veinlets. Winze below drive south of Tunnel G on western lode sunk 18 feet, average width of lode 8 inches, and valued at 1 ounce of gold per ton.—Chance Mine. Tunnel towards Howard's eastern lode extended 10 feet. The lode should be reached during the coming week.—Orlando Mine. Tunnel P towards Orlando eastern lode advanced 17 feet, total 228 feet. Ground much more favourable for driving.—Erection of mill. All the heavy machinery is now in position, and we are awaiting the arrival of the concentrating machinery in order to complete the mill.

CONSOLIDATED BELLINGWE DEVELOPMENT.—Manager's report dated March 18: Developments to end of February: Wanderer's Rest. The drainage adit on lode is in 53 feet from entrance of drive. The lode varies in thickness from 10 inches to 2 feet, and is very rich in places, showing a good deal of visible gold.—Bob's Luck, Drainage adit on lode is 60 feet past No. 2 shaft. The lode is 5 feet wide, very solid; prospects improving, but not payable yet. The prospecting shaft is 68 feet deep, and drives on lode both ways, to connect with No. 1 and No. 2 shafts; are in 10 feet. The lode is 3 feet wide, and gives about same prospects in drive as in shaft.

CROESUS SOUTH UNITED.—Extract from the report of Messrs. Bainbridge, Seymour, and Co., on the progress and working of the mine:—The news from the Croesus South United Gold Mines at Hannan's continues to be very encouraging. Mr. Crossland, the representative at Perth, is reported to have visited and thoroughly inspected the whole of the workings. In confirmation of his cable he states that the main shaft is now to a depth of 156 feet, in which a large body of payable ore has been met with, averaging from 5 ounces to 10 ounces per ton test, the lode matter being similar to the Brownhill formation. Judging by the existence of gold-bearing material, the course of the lode seems to trend in a north-east direction. It is very gratifying to find this important discovery, as it proves that the mode of work has been correct as well as economical. The following assay has been made of the ore at that point:—Date of assay, March 9; assayer's number, 194; description of sample, ferrug. formyn.; gold per ton, 5 ounces 17 dwts. 19 grains.

CLYDE GOLD.—The following are extracts from reports received from our manager at Coolgardie:—February 26. Clyde shaft. The water is being raised out of this shaft, and put in tanks one 4000 and one 1000 (gallons), and it will be used for condensing purposes. This shaft will then be put down to 200 feet level, at which depth it is hoped to reach a larger supply of water.—March 4. Clyde shaft. The water has been raised and stored in tanks, and the farther sinking of the shaft from a depth of 167 feet is now going on. At a depth of 200 feet the reef will be proved by a crosscut east. At this depth it is expected that a much larger supply of water will be met with. I have bought a condenser, and am now proceeding with its erection. It will condense about 1000 gallons per day of 24 hours. This will place us in a much better position, as any mine supplying water to the workmen can at all times secure ample labour, and a reduction of 4s. per day is made in the wages.

ETHEL-HOPE.—The managers of this company, Messrs. Bowes Scott and Company, of Coolgardie, write me, under date March 18, as follows:—Machinery. We have been advised by our forwarding agents that 60 out of 63 packages have been forwarded from Freemantle, and will, within a day or two, arrive at Woolgangie—the head of the line. The remaining three packages were awaiting their turn. You may probably be aware that there has been a great glut of goods of all kinds at Freemantle, which has caused considerable delay to the shippers.—Main shaft. This has been deepened a further distance of 17 feet (total depth 70 feet), and securely timbered. The water is increasing so fast that it will be impracticable to continue work until the pump is fixed.—Crosscut from No. 1 shaft. This has been extended a further distance of 30 feet, total from shaft 66 feet. The face of the crosscut continues in material similar to that last noted. It was expected before the point reached to have crosscut the lode; either in this portion of the ground it has pinched out or been thrown to the eastward. No. 2 shaft has been deepened a further distance of 25 feet, total depth 48 feet. The country is good for sinking; a little water is making in the bottom.—Foundations for reduction plant. These will be ready in time for the erection of the plant as soon as the parts are on the ground.

HAMPTON PLAINS EXPLORATION.—The following is the weekly report of work done on Block 59, dated March 14: No. 1 shaft has been sunk 5 feet, making total depth 95 feet. Drives have been started along the line of reef at this level (95 feet). The west drive has been driven 5 feet, and the east drive 2 feet. The reef keeps an average width of 2 feet 6 inches. The quality of the stone has not improved since I reported last. Sample No. 87 taken of the quartz in face of both drives assayed 4 dwts. 21 grains per ton. Sample No. 4 from 6 inches of vein matter dividing the quartz assayed 6 dwts. 12 grains per ton. No. 2 shaft has been sunk 5 feet, making total depth of shaft 77 feet from brace. Part of the week the men employed at this (No. 2) shaft have been sinking and prospecting on another reef. No. 3 shaft has been sunk 6 feet on the new reef. The shaft has also been logged up and the windlass erected. The reef has been proved by trenches for a distance of 50 yards. The strike of the reef is north and south, and the width about 2 feet. The stone shows gold freely, and when dollied prospects well. Sample No. 83 taken from surface along the reef assayed 2 ounces 19 grains per ton.

HARRIETVILLE.—Fortnightly report of superintendent dated March 13: Tiddledee Mine. Bibby's new lode. Drive north of tunnel F advanced 40 feet, total 190 feet. The lode has ranged from 1 foot to 2 feet 6 inches in width, and is valued at from ½ ounce to 1½ ounces per ton. We are about to rise to the surface working. Drive north of tunnel E advanced 19 feet, total 38 feet. Drive south at same level extended 15 feet, total 36 feet. These drives have been extended north and south of tunnel E on a small vein of auriferous quartz, which was at first supposed to be Bibby's lode, but the developments of the last fortnight at tunnel F show that the main lode is further east, so that we have commenced to extend tunnel E in that direction. No work has been done at the surface workings as the air is foul, and the expense of raising the stone by windlasse was becoming too heavy.—Returns. We have just completed the crushing of 32 tons of stone from the surface workings for a return of 25 ounces 7 dwts. of gold. We have also obtained 14 ounces of gold from the treatment of sand at the pyrites works, total 39 ounces 7 dwts. melted gold.

MOUNT LYELL MINING AND RAILWAY.—Extract of letter dated March 17, received from the head office in Melbourne: We hope to have the two smelters running in May, provided everything progresses as we anticipate. The directors have not yet considered the increase of the smelting plant from the two furnaces now in course of construction. Such satisfactory progress is being made with the line that it is estimated it will be sufficiently far advanced to permit of the mine traffic being run over it in August next, and until the line is ready for traffic the products of the smelters will be stacked.

MYSORE.—R. Hancock. Mining operations for the fortnight ending March 30:—Rowse's shaft, 1460 feet level north of crosscut west. There are three stopes in the back of this level, the average width of the lode being 2 feet 6 inches, giving an average assay of 14 dwts. 8 grains.—1460 feet level north of sump winze. The lode in the stope in the back of this level is 5 feet wide, assaying 15 dwts.—1360 feet level south of crosscut. There are four stopes in the back of this level, the average width of the lode being 1 foot 10 inches, giving an average assay of 1 ounce.—1360 feet level north of crosscut. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 13 dwts. 1 grain.—1360 feet level north of sump winze north-east. This level has been driven 16 feet, making a total distance driven of 423 feet 6 inches. The rise in the back of this level has been put up 9 feet, making a total height of 94 feet 6 inches. The lode is 1 foot wide, assaying 13 dwts. 1 grain. We have started a crosscut east in this level 25 feet north of the sump winze. Driven 17 feet 6 inches. 1360 feet level south of sump winze. There are two stopes in the back of this level, the average width of the lode being 3 feet 6 inches, giving an average assay of 13 dwts. 1 grain.—1260 feet level north. There are five stopes in this level, the average width of the lode being 2 feet 5 inches, giving an average assay of 1 ounce 1 dwt. 14 grains.—1260 feet level north of crosscut. This end has been driven 20 feet 6 inches, making a total distance driven of 125 feet 6 inches. The lode is 4 feet wide, assaying 1 ounce 15 dwts. The rise in the back at the end of the crosscut has been put up 10 feet 6 inches, making a total height of 108 feet 6 inches, and holed to the 1160 feet level north of crosscut.—1260 feet level south of crosscut. This end has been driven 18 feet, making a total distance driven of 149 feet. The lode is 4 feet wide, assaying 1 ounce 15 dwts.—1260 level south. This level has been driven 10 feet 3 inches, making a total distance driven of 287 feet 6 inches. The lode is 1 foot wide, assaying 13 dwts. 1 grain. There are three stopes in the back of this level, the average width of the lode being 1 foot 8 inches, giving an average assay of 1 ounce 17 dwts. 1 grain.—1160 feet level north. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 18 dwts. 3 grains.—1160 feet level north of crosscut. This end has been driven 18 feet, making a total distance driven of 153 feet. The lode is 5 feet wide, assaying 2 ounces. We have started a rise in the back of this level 138 feet north of the crosscut which has been put up 7 feet. The lode is 5 feet wide, assaying 1 ounce 10 dwts.—1160 feet level south. There are five stopes in the back of this level, the average width of the lode being 1 foot 11 inches, giving an average assay of 17 dwts. 20 grains.—North of the crosscut east. The lode in the stope in the back of this level is 2 feet wide, assaying 1 ounce 10 dwts.—1060 feet level north, crosscut east. This has been driven 8 feet, making a total distance driven of 22 feet.—890 feet level north. The lode in the stope in the back of this level is 2 feet wide, assaying 1 ounce 15 dwts.—780 feet level north. The lode in the stope in the back of this level is 2 feet wide, assaying 1 ounce.—620 feet level south. There are two stopes in the back of this level, the average width of the lode being 2 feet, giving an average assay of 16 dwts. 13 grains.—Crocker's shaft. This shaft has been sunk 12 feet, making a total depth of 31 feet below the 1060.—1060 feet level north. This level has been driven 2 feet, making a total distance driven of 85 feet 9 inches. The lode having pinched out the driving of this has been suspended for the present.—1060 feet level south. The rise in the back of this level has been put up 11 feet 6 inches, making a total height of 51 feet. The lode is 5 feet wide, assaying 3 ounces.—890 feet level north. This level has been driven 9 feet, making a total distance driven 292 feet. The driving of this has been suspended, and the machine put to crosscut east from the end of the level; driven 18 feet 6 inches. The lode in the stope in the back of this level is 3 feet wide, assaying 16 dwts. 3 grains.—890 feet level south. There are four stopes in the back of this level, the average width of the lode being 5 feet 3 inches, giving an average assay of 1 ounce 1 dwt. 6 grains.—780 feet level north. The lode in the stope in the back of this level, is 4 feet wide, assaying 1 ounce.—780 feet level south. There are nine stopes in the back of this level, the average width of the lode being 2 feet 9 inches, giving an average assay of 18 dwts. 9 grains.—620 feet level south. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 13 dwts. 1 grain.—236 feet level north. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 18 dwts. 3 grains.—Taylor's shaft, 466 feet level north. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 13 dwts. 1 grain.—Gilbert's shaft. This shaft has been sunk 16 feet, making a total depth of 192 feet below the 650.—650 feet level north. The rise in the back of this level has been put up 14 feet, making a total height of 43 feet. The lode is 3 feet 6 inches wide, mixed. No sample taken.—520 feet level north. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 13 dwts. 1 grain.—520 feet level south. The winze in the bottom of this level has been sunk 4 feet, making a total depth of 54 feet. The lode is 2 feet wide, assaying 1 ounce. The lode in the stope in the back of this level is 1 foot 8 inches wide, assaying 15 dwts.—360 feet level north. The lode in the stope in the bottom of this level is 2 feet wide, assaying 10 dwts.—290 feet level north. There are three stopes in this level, the average width of the lode being 2 feet 1 inch, giving an average assay of 14 dwts. 4 grains.—180 feet level south. There are two stopes in the back of this level, the average width of the lode being 2 feet 1 inch, giving an average assay of 12 dwts. 12 grains.—Tennant's shaft, 750 feet level north of the crosscut west. This end has been driven 14 feet 6 inches, making a total distance driven of 362 feet. The lode is 3 feet 6 inches wide, assaying 13 dwts. 1 grain. We have started to sink a winze in the bottom of this level 336 feet north of the crosscut; sunk 8 feet. The lode is 4 feet wide, assaying 13 dwts. 1 grain.—520 feet level north. The lode in the stope in the back of this level is 2 feet 6 inches wide, assaying 13 dwts. 1 grain.—360 feet level north, south of crosscut. There are two stopes in the back of this level, the average width of the lode being 1 foot, giving an average assay of 15 dwts.—Schaw's shaft, 450 feet level north of crosscut. There are two stopes in the back of this level, the average width of the lode being 1 foot, giving an average assay of 19 dwts. 14 grains.—450 feet level south of crosscut. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 10 dwts.—320 feet level north. There are two stopes in the back of this level, the average width of the lode being 2 feet 6 inches, giving an average assay of 11 dwts. 12 grains.—McTaggart's shaft. This shaft has been sunk 9 feet 8 inches, making a total depth of 56 feet 2 inches below the 650.—650 feet level north of crosscut west. This level has been driven 1 foot 6 inches, making a total distance driven of 11 feet 6 inches. The lode is 1 foot 6 inches wide, assaying 18 dwts. 3 grains.—650 feet level south of crosscut west. This end has been driven 15 feet 6 inches, making a total distance driven of 79 feet 6 inches. There is nothing here to report.—550 feet level north. This level has been driven 2 feet 3 inches, making a total distance driven of 402 feet 8 inches. There is nothing here to report. The winze in the bottom of this level has been sunk 2 feet 3 inches, making a total depth of 28 feet. The lode is 6 inches wide, assaying 1 ounce 5 dwts.—550 feet level south of crosscut west. This level has been driven 12 feet 6 inches, making a total distance driven of 380 feet 3 inches. The lode is 2 feet wide, mixed, assaying 13 dwts. 1 grain. The No. 1 winze in the bottom of this level has been sunk 1 foot 6 inches, making a total depth of 65 feet. The lode is 9 inches wide, assaying 15 dwts. The No. 2 winze in the bottom of this level has been sunk 4 feet 9 inches, making a total depth of 41 feet 9 inches. The lode is 1 foot wide, assaying 15 dwts.—320 feet level south. There are two stopes in the back of this level, the average width of the lode being 2 feet 6 inches, giving an average assay of 10 dwts.—Prospect

shaft No. 2, 117 feet level south. This level has been driven 9 feet 6 inches, making a total distance driven of 39 feet 6 inches. There is a small branch of quartz about 3 inches wide against the hanging wall of the lode, assaying 1 dwt. 23 grains.—Ribblesdale's shaft. This shaft has been sunk 7 feet, making a total distance of 67 feet below the 1520. The lode is 3 feet wide, mixed, assaying 5 dwts. 5 grains.—1520 feet level north. This level has been driven 21 feet, making a total distance driven of 150 feet. The lode is 2 feet wide, assaying 6 dwts. 12 grains.—Crosscut west from the lode. This has been driven 15 feet, making a total distance driven of 150 feet.—Williams' shaft. Crosscut east from the 173. The driving of this has been suspended, and the men put to drive north 17 feet from the end of the crosscut. Driven 7 feet. There are a few small stringers of quartz, assaying 2 dwts. 4 grains.—Health. Good.

MOUNT LYELL.—Engineer in charge of mine reports for week ending March 6: No. 1 tunnel, north drive. The face has been extended 3 feet, total 6 feet; the face is in high grade pyrites.——No. 3 tunnel, south drive. The face has been driven 3 feet 6 inches, total 554 feet. No change.—No. 4 tunnel, south drive. Distance driven for week 6 feet, total 461 feet.—No. 4 tunnel, south drive, No. 3 crosscut. Crosscut has been extended 4 feet, total 18 feet; face in good ore.—No. 4 tunnel, No. 4 crosscut, south drive. Face extended 2 feet, total 6 feet.—No. 4 tunnel, south drive, No. 5 crosscut. Driven 1 foot 6 inches, total 4 feet 6 inches; face very hard.—Surface work, machinery site. The levelling of the machinery site and small cutting for a siding from the haulage line, and the formation from the machinery site to the self-acting incline will be finished to-day.—Self-acting incline. A start has been made on the excavation and grading.—Progress report for week ending March 6. Hauling line. Mine side of tram ballasted, foundation walls of ore bins in progress.—Smelter building. Finishing off.—Crusher building. Framework of different parts and roofs nearing completion rapidly, frame of flux crusher finished and erected, that of ore crusher in progress.—Babcock and Wilcox boilers. Completely finished, connecting same with root blowers, &c.—Blast furnaces. Smoke stack of No. 2 erected, rain shed put on, fitting together smaller hearth jackets of both furnaces, and putting on various binders.—Hot blast stoves. Mounting hot-air connections with main blast pipe, also erecting cold-air connections with blowers.—Converter department. Hill flue in progress.—Flux quarries. Stripping limestone deposits finished for the present, quarry work begun, uncovering quartz fluxed deposits and prolong tram into same. Forming short siding into upper floor of crusher building from through tram and framing trestles of approach. Weather, good. Railway superintending engineer reports that all work in connection with the construction of the railway line is progressing satisfactorily.

MAY CONSOLIDATED.—The directors submit the following report for the month of February: Battery. 100 stamps ran 20 days, crushed 9000 tons. Gold won 2530 ounces average 5·622 dwts. per ton, valued at 72s. 6d. per ounce equal £9171 5s.—Cyanide works, Siemen's process. 3960 tons tailings treated Gold won 708 ounces bullion average 2·7 dwts. fine gold per ton at 60s. per ounce equal £2124; other receipts, £44; total, £11,339 5s.—Working costs. Mining, 9000 tons, cost £6024 14s. 8d. equal 13s. 4·66d. per ton; Development, 9000 tons cost £839 4s. 11d. equal 1s. 10·379d. per ton; total, £6863 19s. 7d. equal 15s. 3·039d. per ton; tramming, 9000 tons, cost £265 15s. 1d. equal 7.086d. per ton; crushing and sorting, 9000 tons, cost £354 0s. 1d. equal 9·44d. per ton; milling, 9000 tons, cost £2500 8s. equal 5s. 6·677d. per ton; total, £9984 2s. 9d. equal 22s. 2·242d.; tailings treatment, Siemen's process, 3960 tons, cost £819 2s. 3d. equal 4s. 1·668d. per ton; total, £10,803 5s.; profit, £536.—Expenditure on capital account, Construction, &c., £2765 12s. 11d. Note.—Mill. The decrease for February is due to stoppages in connection with the conversion of the old 50 stamps into stamps of heavy pattern.—Cyanide works. The new tailings pump not having arrived, and the old pump having broken down, prevented a larger quantity of tailings being treated.

MYSORE REEFS (Kangundy).—Fortnightly report of Captain M. Scantlebery, mine agent, dated April 1: Underlie shaft. This shaft has been sunk 6 feet 6 inches, now 106 feet below the 425 feet level. The quartz is 6 inches wide, assaying 3 dwts. 6 grains of gold to the ton. Intermediate level 60 feet below the 425 has been extended 13 feet, now 52 feet from shaft. The quartz is 18 inches wide, assaying 17 dwts. 8 grains of gold to the ton.—Stope above this level. The quartz is 18 inches wide, assaying 10 dwts. of gold to the ton. 425 feet level north has been advanced 11 feet, now 188 feet 6 inches from shaft. The lode is 1 foot 6 inches wide, composed of quartz, arsenical pyrites and schist, assaying 3 dwts. 6 grains of gold to the ton. Winze below 425 feet level north has been sunk 6 feet, now 50 feet 6 inches below the level. The quartz is 2 feet 9 inches wide, assaying 1 ounce 12 dwts. of gold to the ton.—Stope below the 425 feet level north. The quartz is 1 foot 6 inches wide, assaying 1 ounce 10 dwts. of gold to the ton. Vertical shaft has been sunk 6 feet, now 324 feet 3 inches from surface. The quartz is 6 inches wide, assaying 18 dwts. 16 grains of gold to the ton. 318 feet level north has been extended 8 feet 6 inches, now 18 feet from shaft. The quartz is 6 inches wide, assaying 8 dwts. of gold to the ton. 318 feet level south has been advanced 5 feet, now 18 feet 6 inches from shaft. The quartz is pinched. We have suspended the driving of these ends, and resumed the sinking of the shaft. Crosscut east of 260 feet level north has been extended 16 feet 3 inches, now 42 feet 6 inches from level. New north shaft has been sunk 4 feet 6 inches, now 105 feet 9 inches from surface. Trial shaft in old workings to the east of the new north shaft has been sunk 14 feet. Now 42 feet from surface. We are still sinking in ancient workings.

NUNDYDROOG.—Thomas Richards's report for the fortnight ending March 28:—Kennedy's shaft. Cistern plat is now being cut at the 700 feet level that a plunger lift may be fixed there, the sinking of the shaft below this level will be resumed forthwith. The 700 north has been driven 7 feet, total distance 54 feet 6 inches. Lode 9 inches wide, assaying 6 dwts. 6 grains. The 700 south has been driven 8 feet, total distance 51 feet 6 inches. Lode 6 feet wide, assaying 2 ounces 12 dwts. 12 grains. The 600 north has been driven 14 feet 6 inches, total distance 437 feet 6 inches. The lode 1 feet wide assays 3 dwts. 18 grains. The 600 north rise has been put up 31 feet 6 inches, total height 44 feet. Lode 2 feet wide, assaying 11 dwts. 6 grains. The 600 south crosscut west has been extended 17 feet, total distance 34 feet; stringers of quartz assaying a trace of gold have been passed through. In two stopes in the back of the 520 north the lode averages 7 feet 6 inches in width, and 12 dwts. 12 grains in assay value. In the stope in the back of the 440 north the lode is 6 feet wide and assays 2 ounces of gold per ton. The 440 south has been driven 24 feet 6 inches, total distance 1370 feet. The 440 south crosscut west has been extended 19 feet, total distance 139 feet. No change. The 370 north crosscut west has been extended 11 feet 6 inches, total distance 499 feet. No change. In two stopes in the back of the 370 north the lode averages 2 feet 9 inches in width, and 1 ounce 8 dwts. 3 grains in assay value. In the stope in the back of 370 south the lode is 6 feet wide, assaying 1 ounce 1 dwt. 6 grains. The 300 north has been extended 14 feet, total distance 384 feet. The lode, 1 foot wide, assays 6 dwts. 6 grains. The 300 intermediate drivage north has been driven 17 feet, total distance 45 feet 6 inches. Lode 2 feet wide, assays 10 dwts. The lode in the stope in the back of the 300 north is 3 feet 6 inches wide, and assays 10 dwts. The 230 north has been driven 3 feet, total distance 376 feet 6 inches. The lode consists of stringers of quartz, which assays a trace of gold. In the stope in the back of the 230 north the lode is 9 feet wide, assaying 5 dwts. The 230 south has been driven 16 feet 9 inches, total distance 289 feet 3 inches. The lode assays a trace of gold. The lode in the stope in the back of the 160 north is 5 feet wide, assaying 8 dwts. 18 grains. The 160 south has been driven 19 feet, total distance 463 feet 9 inches. Lode 3 feet 6 inches wide, assays a trace of gold. The 95 north has been driven 4 feet 6 inches, total distance 20 feet 9 inches. Lode assays a trace of gold. North shaft has been sunk 6 feet 6 inches, total depth 50 feet 6 inches below 600 feet level. Lode 3 feet wide, assays 10 dwts. New shaft has been sunk 13 feet, total depth 94 feet from the surface. Main shaft has been sunk 4 feet, total depth 6 feet below the 1160 feet level. Lode of no assay value. The 1160 level north has been driven 9 feet 6 inches, total distance 35 feet. Lode 6 inches wide, assays a trace of gold. The 1080 north has been driven 16 feet, total distance 400 feet. Lode of no assay value. The 1080 north winze has been sunk 8 feet 6 inches, total depth 40 feet. Lode 5 feet wide, assays 1 ounce 2 dwts. 12 grains. The crosscut west at the top of the 1080 north rise has been driven 5 feet 6 inches, and communicated with the 1000 level north. In the 920 north back stope the lode is 6 feet wide, and assays 8 dwts. 18 grains of gold per ton. The lode in the stope in the back of the 920 south is 6 feet 6 inches wide, assaying 11 dwts 6 grains. In the 840 south back stope the lode is 5 feet wide, and assays 5 dwts. The 680 north has been driven 13 feet 6 inches, total distance 572 feet 6 inches. Lode of no assay value. The 520 north has been driven 18 feet 6 inches, total distance 475 feet 6 inches. The 370 north has been driven 16 feet 9 inches, total distance 282 feet 9 inches. Lode well defined, but of no assay value.—Taylor's shaft, The 1240 north has been driven 12 feet 6 inches, total distance 264 feet. Lode 1 foot wide, assaying 1 dwt. 6 grains. The 1240 south crosscut east has been extended 13 feet 3 inches, total distance 23 feet 9 inches. No change. The 1160 north winze has been sunk 9 feet, total depth 41 feet. Lode 9 inches wide, assays a trace of gold. Suspended. In two stopes in the back of the 1000 north the lode averages 2 feet 9 inches in width, and 4 dwts. 16 grains in assay value. In the 920 north back stope the lode is 3 feet wide, and assays 4 dwts. 9 grains. In two stopes in the back of the 840 north the lode averages 2 feet 9 inches in width, and 11 dwts. 21 grains in assay value. The 840 south rise has been put up 11 feet 9 inches, total height 28 feet 6 inches. Lode 6 inches wide, assays 4 dwts. In the 600 north back stope the lode is 3 feet wide, and assays 7 dwts. 12 grains. The lode in the stope in the bottom of the 520 north is 3 feet wide, and assays 8 dwts. 18 grains. In the stope in the back of the 520 north the lode is 3 feet wide, assaying 6 dwts. 6 grains, and in the 230 south back stope it is 2 feet wide, assaying 7 dwts. 12 grains.—Old mill samples. Pulp 1 ounce 2 dwts. 12 grains. Tailings 3 dwts, 18 grains.—New mill samples. Pulp 1 ounce 11 dwts. 6 grains. Tailings 4 dwts. 18 grains.

NINE REEFS.—Mine report for fortnight ending March 30:—Oriental lode. Main shaft. We have now completed cutting plat at the 310 feet level and are engaged in timbering the same. Next week we hope to start to sink the shaft.—Baynard's shaft. This shaft is now completed to the 310 feet level and in good order.—Surface work. The erection of the new winding engine is completed.—Health. Good.

RHODESIA (LIMITED).—From the manager's report of 5th, and letter of 9th March: Criterion reef. I bought a Sydney hand pump from the Mashonaland Agency, and we have now continued sinking on No. 4 shaft. I have also had two new shafts started.—Shaft No. 4 east drive. Number of feet driven during fortnight 15.—West drive. Number of feet driven during fortnight 16; total driven in this shaft to date 378 feet. Sinking from the 50 feet level has been stopped by water; the pump is now being fixed, and work will proceed again from Monday.—No. 3 shaft, south-west drive. Number of feet driven during fortnight, 5; average size of the reef 28 inches.—North-east drive. Number of feet driven during fortnight 12.—West drive. Number of feet driven during fortnight, 4; number of feet sunk during fortnight, 5; total amount of work done in this shaft to date is 270 feet. In this shaft the reef is being followed down from the 50 feet level, and so far the prospects are encouraging.—Shaft No. 2. Number of feet sunk during fortnight, 5, total depth to date 69 feet. This shaft is also being carried on from the 50 feet level to the 100 feet level, where the reef will again be driven for.—Shaft No. 7. Number of feet sunk to date, 10. This is a new shaft in which a nice and compact body of quartz has been opened; average size of the reef 12 inches. This shaft is on a lead running into our ground from the north-east, it is situated between shafts Nos. 2 and 3 on the plan.—No. 8 shaft. Total sunk to date 10 feet. This is also a new shaft, but as yet the old working, which I fancy goes to a considerable depth, has not yet been bottomed. The shaft is also on a lead coming into our ground from the north-east, and is situated to the north of No. 6 shaft. I am glad to say that we have at last managed to get sufficient native labour, and the work is progressing favourably.

SOUTHLEIGH MINES.—Mr. R. R. Hollins (director) recently visited the mine, and took a sample from the top portion of the old shaft along the face exposed for 100 feet. This sample assayed 13 dwts.

VAN RYN.—Report on operations for month ending February 29: The mines. General manager reports. Mine No. 4. New main shaft sinking, 34½ feet; old main shaft sinking, 19 feet; fourth level main shaft rise, 18½ feet; driving third level, 73½ feet; driving fourth level, 57½ feet; driving second level, 72 feet; driving first level leader, 54½ feet; driving second level intermediate drive east, 19 feet; fourth level, second rise east, 54½ feet.—Mine No. 8. Sinking main shaft, 10 feet; driving first level, 76½ feet; driving second level, 56½ feet; second level, second rise east, 45 feet; second level boxhole, 12 feet; first level, intermediate drive east, 23 feet: second level, intermediate drive east, 6 feet; total for month, 631¾ feet.—Ore developed. Mine No. 4. First level, 664 tons; second level, 570 tons; third level, 575 tons; fourth level, 1601 tons.—Mine No. 8, First level, 1150 tons; second level, 970 tons; total, 5530.—Ore in sight. Mine No. 4. First level, 26,364 tons; second level, 7843; third level, 18,003; fourth level, 20,918 tons; total, 73,128 tons.—Mine No. 8. First level, 19,083; second level, 26,639; total, 45,722; grand total, 118,850 tons. Mine No. 4 new main shaft was sunk 34½ feet, and timbered 30 feet; total depth, 384 feet, Old main shaft was sunk 19 feet; total depth, 708 feet 6 inches. Fourth level drives were extended 57½ feet; total length, 1347½ feet. No work has been done in the east end of the drive, but a rise has been put up. The reef in the west drive has been driven 3 feet, and assayed on an averaged 15 dwts. 1 grain. Third level drives were extended east 73½ feet. Total length, 1487 feet. Second level drive was extended east 72 feet. Total length, 1480 feet. First level leader drive was extended east 54½ feet. Total length, 112 feet. Average width of reef 3 inches. Assay value, 2 ounces 10 dwts. 5 grains. Mine No. 8, main shaft No. 8 was sunk 10 feet; depth below second level, 136½ feet. Total depth, 396½ feet. First level drive was extended east 76½ feet. Total length, 1573½ feet. Width of reef 6 inches. Assay value over 30 inches stope 8 dwts. 20 grains. Second level drive east was extended 56½ feet. Total length, 693 feet.—Stamp mill. 50 stamps ran 21 days 6 hours. Ore crushed, 3323 tons. Crushed per stamp per day of 24 hours, 3·1 tons. Gold won (plates and concentrates), 1491 ounces. Average yield of gold from plates and concentrates, 8 89 dwts. per ton. Continual break downs of the old machinery are unavoidable, and it was expected that it would be discarded early this year, but on account of the late arrival of the new battery engine, crushing has to be continued with the old mill.—Cyanide works. Tonnage treated, 3600; cost per ton, 5s. 7d.; actual extraction, 62 per cent.; assay value, 3 dwts. 18 grains.—New works. The machinery has not arrived, and the progress made during the month has been small. Native labour is still in demand; 200 boys being wanted for present work. It has been decided to erect a new native compound to accommodate 2000 boys.—Accounts. 1. Cost of production and costs per ton milled. Mining, hauling, and pumping £2620 12s., 15s. 9d, per ton, transport £205 6s., 1s. 2d., milling £818 17s. 8d., 4s. 11d. per ton, maintenance £311 16s. 8d., 1s. 10d., redemption £581 10s. 6d., 3s. 6d. per ton, general charges £340 9s. 9d., 2s. per ton, total £4878 12s. 7d., £1 9s. 4d. per ton, cyanide works £1005 8s. 4d., 5s. 7d. per ton, total costs £5884 0s. 11d., £1 14s. 11d., realised per ton £2 4s. 2d., profit per ton 9s. 2d.—2. Revenue. Gold at 73s. 3d., 1491 ounces, value £5460 15s. 9d., concentrates at 50s., 30 ounces, £90, cyanide process 560 ounces, value £1799, total 2081 ounces, value £7349 15s. 9d., rents value £32, total revenue 44s. 5d. per ton, value £7381 15s. 9d.—3. Profit, Profit for month (plates and concentrates) £726 4s. 8d., estimated profit (cyanide works) £779 6s. 6d., total profit for month £1505 11s. 2d.—4. Capital expenditure. Permanent works, £734 12s., development £1828 2s. 4d., buildings £586 13s. 2d., machinery and plant £8608 4s., surface works £500 9s. 11d., furniture £95 16s., total £12,353 17s. 5d.

METAL CIRCULARS.

Messrs. HENRY BATH and SON'S copper report, dated April 17, has the following:—The Chili charters for the past fortnight are advised as 250 tons. The latest Exchange is 17½d. Our market opened firm on the 7th instant, after the Easter holidays, at an advance of 7s, 6d. per ton, and we reached £45 12 6d. for cash parcels on that day, though three months copper was neglected at 5s. more. On the 8th instant we dropped back to £45 5s., whilst it further declined to £44 17s. 6d. on the 9th, and £44 11s. 3d. on the 10th instant, the market finally touching £44 3s. 9d. on the resumption of business on the 13th instant. From this point, however, we have gradually picked up again, a moderate business being done yesterday up to £44 17s. 6d. cash. This morning the market was firm with a moderate business up to £45 2s. 6d., and closed at £45 1s. 3d. cash, £45 8s. 3d. forward. The latest quotation for Lake copper in New York is 10·87½ cents per lb. The shipments from the United States for the first half of April are advised as 3976 tons. The Rio Tinto Company have declared a final dividend of 12s., making 11 per cent. for the year. A cargo of Boleo material consisting of about 520 tons of bar copper and 1200 tons of matte has arrived at Swansea and is now in course of delivery to the smelters. The arrivals and deliveries at Hamburg, Rotterdam, and Antwerp during the past fortnight amount to about 1600 tons. Imports of American copper into England have been 1374 tons and into France 245 tons or 1619 tons against 622 tons last year. Total actual deliveries for the fortnight have been 6299 tons against 5720 tons imports Stocks have increased 421 tons. Total visible supply shows 39,551 tons against 40,080 tons last fortnight. The only transaction in furnace material during the past fortnight, that we hear of, is 310 tons Libiola ore and mundic on private terms.

England and France.	Imports.	D'liv'r's.	Stocks.	Afloat & Chartered for.	Total visible supply.
Chili copper at Liverpool, Swansea, and in France	1116	1775	30,312	2400	32,712
Foreign copper in London, chiefly Australian and Japanese	852	823	913	900	1,813
American copper at Liverpool, London, and Swansea	1374	1324	628	—	628
Other copper at Liverpool & Swansea	3121	1992	2,822	—	2,822
English copper at Liverpool and Swansea	—	—	—	—	—
American copper in France	245	375	1,227	—	1,227
Other copper in France	10	10	234	—	234
Tons fine copper during the fortnight	6720	6299	36,251	3300	39,551
Against tons on April 2, 1896	6994	9039	35,850	4250	40,080
Against tons on March 17, 1896	3712	5318	37,875	3200	41,075

	1895.	1894.	1893.	1892.	1891.
Total visible supply, April 16	53,780	45,734	52,873	54,307	58,535
	1890.	1889.	1888.	1887.	
Total visible supply, April 16	92,355	126,303	62,158	56,738	

Price of Chili bars same date:—£40 7s. 6d., £40 3s. 9d., £44 12s. 6d., £45 11s. 3d., £51 15s., £48 10s., £37 7s. 6d., £30 3s. 9d., £40 5s.

	1896.	1895.	1894.	1893.	1892.
Imports from Chili and Bolivia from January 1 to date	5,958	5,699	6,252	5,247	5,471
Imports from America from January 1 to date	12,740	11,479	11,744	8,956	8,040
	1891.	1890.	1889.	1888.	1887.
Imports from Chili and Bolivia from January 1 to date	5,159	7,931	8,208	11,090	8,282
Imports from America from January 1 to date	11,415	6,808	9,817	11,668	1,304

The shipments to Europe from America from January 1 to date are 31,440 tons as against 16,731 for corresponding period last year.

The shipments afloat from America are estimated at 5000 tons.

Supply of West Coast copper may be estimated from the following figures:—

	Tons.
Actual stocks at Swansea, Liverpool, and in France	30,312
Afloat and chartered for at date of last advices per mail and cablegram	2,400
Total	32,712 against 34,119 tons April 2, 1896.

against same date 1895, stock 39,697 afloat, &c. 2,500=42,197
1894, 32,195 ,, 2,600=34,795
1893, 35,034 ,, 3,750=38,784
1892, 33,989 ,, 2,750=36,719

Quotations for West Coast copper are as follows:—

To-day.	April 18, 1895.	April 17, 1894.	April 18, 1893.	April 21, 1892.
Ores } 8/9 to 9/6	8/	7/7½	8/10½	8/7½
Regulus }				
Bars	£45 1/3	£40 7/6	£40 3/9	£45 12/6	£45 11/3
Ingots, Uruguay	Nom.	Nom.	£43 10/	£49 5/	£52
Precipitate about 9/3 to 9/9	8/7½	8/4½	9/3	9/1½

For other descriptions we quote to-day:—Wallaroo, nominal; English tough about £48 10s. to £49; Burra Burra, nominal; English manufactured, about £56; best selected, about £49 to £50; India sheets, about £53; G.M.B. copper £45 1s. 3d. cash, and £45 6s. 3d. three months.—Sulphate of copper. Quotations a little easier at £13 to £13 cash and forward. Tin quiet, closing at £59 17s. 6d. cash, £60 10s. three months. Spelter about £15 11s. 9d.; English about £16 6s. 3d.; blende of 50 per cent. is worth about £3, and calamine about £2 2s. 6d. Lead about £10 18s. 9d.; with silver 50 to 80 ounces about £11 5s. to £11 10s.; lead ore of 70 per cent. is worth about £5 per ton.—Pig iron. Closing quotations for Scotch pigs are 46s. 2d.; Middlesbrough, 37s. 10d.; hematite, 48s. 1½d. cash. Antimony quiet; star regulus about £30; ore £8 for 50 per cent. good quality and produce; Crude about £14 per ton.—Quicksilver. The official price is £6 17s. 6d.; seconds, 1s. 6d. to 2s. less. Bar silver, 31d. per ounce standard.—Discount. The Bank rate remains at 2 per cent.

Messrs. HARRISTON and Co's. copper report, dated Liverpool, April 16, says:—Chili charters for the past fortnight are cabled as 250 tons, making the total since December 31 last 6300 tons, against 5850 tons same time last year. Exchange 17½d. Since our last the market for G.M.B.'s has been irregular, about 11,300 tons sold (chiefly cash) at from £45 12s. 6d. cash and £45 17s. 6d. three months down to £44 2s. 6d. and £44 6s. 3d. respectively, closing firm to-day with buyers of cash at £44 18s. 3d. and three months at £45 2s. 6d. The following are the returns of the Copper Producers' Committee:—

	March.	Nine months.	Maximum allowed under old agreement.
European Production...Tons	6,910	61,507	68,012
American ,,	16,722	122,685	91,913
,, from Pyrites	1,200	10,200	10,381
Total	24,832	197,372	164,326
American Exports	10,892	58,364	45,010

The price of Lake copper is 10·87½ cents per lb. The Rio Tinto Company have declared a dividend of 12s. per share, equal to 11 per cent. for the year. The total stocks in Liverpool, Swansea, London, and Havre are 36,251 tons, against 35,830 tons on the 1st inst., showing an increase of 421 tons for the fortnight. The stocks include about 2500 tons of copper sold, but not yet delivered to smelters. The visible supply for the fortnight is 39,526 tons, against 40,054 tons on the 1st inst., showing a decrease of 528 tons. Refined and manufactured sorts are steady. Quotations being:—Tough Cake, £48 to £48 10s., best select £48 15s. to £49 5s., Indian sheets £53 to £54, strong sheets £56, and yellow metal sheets 4½d. per lb. The sales of furnace material comprise 310 tons Libiola and mundic ore and 100 tons Portuguese ore, both to arrive, on private terms.

	Tons fine.		Tons fine.	
Import of Chili copper during the past fortnight	583	against	1,343	same time last year.
Delivery of Chili copper during the past fortnight	1,440	,,	564	,, ,,
Import of other copper during the past fortnight	4,388	,,	2,488	,, ,,
Delivery of other copper during the past fortnight	3,215	,,	2,331	,, ,,

The total imports of Chili and other copper into Liverpool and Swansea since January 1 have been 24,046 tons; deliveries during the same period 30,393 tons fine; for same time last year the figures were 20,095 and 19,254 respectively.

Quotations are:	To-day.		April 1, 1896.
Chili bars	£44 16s. 3d. cash and £45 2s. 3d. 3 months	...	£45 2s. 6d. cash and £45 6s. 3d. 3 months
,, Ore	8s. 3d. to 8s. 9d.	...	8s. 3d. to 8s. 9d.
,, Regulus or matte	9s. 0d. to 9s. 3d.	...	9s. 0d. to 9s. 3d.
Precipitate	9s. 3d. to 9s. 6d.	...	9s. 3d. to 9s. 6d.
	April 18, 1895.		April 18, 1894.
Chili bars	£40 3s. 9d. cash and £40 16s. 3d. 3 months	...	£40 3s. 9d. cash and £40 15s. 0d. 2 months
,, Ore	7s. 0d. to 7s. 6d.	...	7s. 0d to 7s. 6d.
,, Regulus or matte	7s. 6d. to 8s. 0d.	...	8s. 0d. to 8s. 3d.
Precipitate	8s. 0d. to 8s. 3d.	...	8s. 3d. to 8s. 6d.

Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

	Ores.		Regulus.		Bars.		Ingots.
Liverpool	10	...	—	...	28,851	...	171
Swansea	—	...	—	...	300	...	—
	10	...	—	...	29,151	...	171

Prices of Cash Bars.

	Tons.		Tons.			
Representing about	29,324	fine copper against	30,181	tons April 1, 1896.	£45	0 0
against ,,	39,467	,,	April 18, 1895	£40	3 9
,, ,,	31,728	,,	April 16, 1894	£44	11 9
,, ,,	30,159	,,	April 19, 1893		

	Tons fine.		Tons.	
Stock of other copper contained in matte, foreign ore and Spanish precipitate	2424	against	5183	April 1, 1896. April 18, 1895.
Stock of Chili bars, ingots, and barilla in Havre, including Rouen and Dunkirk	988	,,	230	,,
Stock of copper other than Chili in Havre and Dunkirk	1571	,,	483	,,
Stock of Chili copper afloat and chartered for to date	2376	,,	3543	,,
Stock of foreign copper in London	944	,,	4717	,,

Tin.—Since our last the market for cash straits has fluctuated between £69 7s. 6d. and £69, closing to-day at £69 12s. 6d., Australian £69 12s. 6d. English £63 to £63 10s., and Peruvian £48 to £59 according to quality.—Sulphate of copper. Makers are firm at £19 10s. to £20 spot and forward, but there are some second-hand lots available at £18. June-July easier at about £17.—Lead during the past fortnight has been quiet, closing dull at £10 17s. 6d. for Spanish, and £11 2s. 6d. for English.—Spelter. The market since our last has been steady, and closes firm at £15 12s. 6d. for ordinary silesian brands.—Quicksilver. Since our last the market has been steady, at £3 16s. 6d. per bottle for Spanish.—Bar silver. Prices have fluctuated between 31¾d. and 30⅞d. per ounce standard, closing to-day at 30⅞d.—Antimony steady, star regulus at £30 per ton. Ore irregular, about £7 to £8 for 50 per cent. good quality and produce.—Bank rate and discount. The rate has remained at 2 per cent. since February 22, 1894.

Messrs. JAMES LEWIS and SON'S mid-monthly report on copper, dated Liverpool, April 16, states:—Copper. From £45 on the 1st inst. good merchantable copper advanced to £45 12s. 6d. for cash on the resumption of business after the holidays. Under the pressure of persistent selling of three months' prompt by a prominent American firm, values gradually gave way until £44 2s. 6d. was reached for cash on the 13th inst., the premium for three months' prompt being reduced to 3s. 9d. per ton. The decline inducing increased purchases of cash for consumption and of forward delivery for speculation, the buying exceeding the selling strength, and values have consequently improved 15s. per ton to £44 17s. 6d. for cash. The prompts of large quantities of good merchantable copper sold three months ago at £41 10s. to £43 fall due during the next fortnight, and as a large portion of these have probably yet to be bought great efforts have been made to depress the market. The arrival of a large cargo of bars and matte from Boleo, representing 1700 tons fine, sold on the basis of the price ruling for G.M. copper shortly before and after its arrival, also exercised a depressing influence, and a large increase in the stocks to-day was consequently expected. The deliveries of other copper, especially Chili bars, have, however, been so large that the total increase amounts to only 431 tons, while in the "visible supply" there is a decrease of 527 tons. As chief part of the Boleo cargo will be delivered to the smelters to whom it is sold during the coming fortnight, a large decrease in the stocks at the end of the month is probable. Business was interfered with by the holidays, but during the last few days the demand from consumers has become more active. Best selected sold down to £49, but there are now buyers at £50 per ton. For Lake copper in New York 11 cents is said to have been paid during the last few days. Copper for early delivery is very scarce, and the demand from consumers is more active. The enclosed statistics for the first quarter of this year show an increase in English home consumption of 6654 tons, or at the rate of 26,616 tons per annum. Official figures issued in Germany show the consumption there during January and February of this year to have exceeded that of the same months of 1895 by 3075 tons, or at the rate of 18,450 tons per annum. Large as the American production has been for the first three months of this year, being at the rate for the whole year of 34,937 tons over that for 1895, should the consumption in England and Germany alone continue on the scale of the last three months, a further increase of 10,000 tons per annum in the production of the world would be required to prevent further decrease of stocks, assuming that there is no increase of consumption in other countries. Production generally, with the exception of the United States, shows no signs of increase. The Times report of last week of trade in Scotland states that it continues very active, that shipbuilders are busy and booking large orders, that copper smelters are busier than they have been for years, and that the same applies to boilermakers, marine and locomotive engineers, and brassfounders. We hear the same of the Tyne, where the leading shipbuilders have orders for warships booked extending over several years, and are extending their yards. At the end of March 400 mercantile vessels were under construction in the United Kingdom of 769,264 gross tonnage, or 113,000 tons more than at the same time last year, 63 warships of a total displacement of 312,375 tons were also in course of construction on the 31st ult. The directors of the Rio Tinto Company have declared a dividend for the latter half of 1895 of 12s. per share, making 22s. for the year, equal to 11 per cent. The average price of G.M. copper for 1895 was £42 19s. 7d. per ton, and for the first quarter of 1896 £43 13s. 7d. per ton. The directors of the Tharsis Company have declared a dividend of 7s. per share for the year 1895 equal to 17½ per cent. Producers' returns are as follows:—

	March.		Three months		2 months.
	1896.	1895.	1896.	1895.	1895.
	Tons.	Tons.	Tons.	Tons.	Tons.
European Production	16,722	12,563	47,910	33,767	155,367
American Production	6,910	7,424	20,840	20,900	86 178
Do. Pyrites, &c.	1,200	1,800	3,600	4,800	15,700
Do. Exports	10,892	3,914	27,297	14,627	65,321

American exports for the first half of April are 4629 tons. Stocks have increased 431 tons, and the visible supply decreased 527 tons during the past fortnight. Imports to date are 6144 tons, and deliveries 12,126 tons greater than last year. The arrivals in England and France for the fortnight have been 6720 tons, and the deliveries 6299 tons. The arrivals of Chili in Liverpool and Swansea have been 583 tons, and the deliveries 1440 tons, and from other countries 4368 and 3155 tons fine respectively. The arrivals here and in Swansea from the United States have been 350 tons bars, 497 tons ingots, and 745 tons matte, equal to about 1247 tons fine, in London 127, and in France 245 tons fine. The Chili charters for the past fortnight are advised as 250 tons, and exchange 17⅝d. Sales of furnace material reported are:—April 2, 1000 tons matte American argentiferous to arrive on private terms.—April 15, 300 tons matte American argentiferous to arrive on private terms.—April 15, 300 tons ore Libiola to arrive on private terms. 120 tons ore Portuguese to arrive on private terms. Quotations to-day are:—Chili bars and good merchantable copper £44 17s. 6d. for cash, and £45 3s. 9d. for three months prompt buyers. English best selected ingots £51 to £50 10s. and tough cake £49 5s. to £49 15s. per ton. Ore of 20 per cent. fine. Regulus and matte 9s. 3d. per unit,

Stocks of copper (tons fine)—

	Jan. 1, 1894.	Jan. 1, 1895.	Dec. 1, 1895.	Jan. 1, 1896.
Chilian in Liverpool and Swansea	30,014	36,937	37,148	37,517
Chilian in France	1,571	437	525	353
American in Liverpool and Swansea	4,102	4,428	878	916
American in France	779	544	503	652
Sundries in Liverpool and Swansea	1,147	2,444	962	1,352
Ditto in London	4,733	5,669	2,164	1,743
Ditto in France	395	312	404	384
English G.M.C. in Liverpool and Swansea	4	—	—	—
Total	42,745	50,764	42,481	42,917
	Feb. 1, 1896.	Mar. 1, 1896.	April 1, 1896.	April 16, 1896.
Chilian in Liverpool and Swansea	35,142	33,415	30,161	29,324
Chilian in France	515	665	788	880
American in Liverpool and Swansea	962	696	578	602
American in France	837	1,437	1,367	1,737
Sundries in Liverpool and Swansea	2,304	1,648	1,693	2,822
Ditto in London	1,557	1,221	889	944
Ditto in France	311	399	334	442
English G.M.C. in Liverpool and Swansea	—	—	—	—
Total	42,128	39,481	35,830	36,251

Afloat as advised by mail and cable to date:—

	Jan. 1, 1894.	Jan. 1, 1895.	Dec. 1, 1895.	Jan. 1. 1896.
From Chili	3,678	3,019	2,138	1,920
From Australia	850	900	1,000	1,000
Total visible supply	47,273	54,683	45,619	45,837
	Feb. 1, 1896.	Mar. 1, 1896.	Apl. 1, 1896.	Apl. 16, 1896.
From Chili	2,963	2,762	3,124	3,378
From Australia	1,100	1,250	1,100	900
Total visible supply	46,191	43,493	43,254	3 ,527

Quotations:—Bars per ton, £42 17s. 6d., £40 11s. 3d., £42 17s. 6d., £41 6s. 3d., £43 17s. 6d., £45 17s. 6d., £45, £44 17s. 6d. Ore per unit, 9s. 3d., 8s., 9s. 6d., 8s. 3d., 8s. 6d., 9s., 8s. 10½d., 9s.

Imports of copper (exclusive of pyrites and precipitate to outports) from January 1 to date:—

	1894.	1895.	1893.
Chili into Liverpool and Swansea	5,329	5,159	4,351
America ditto ditto	9,977	7,070	9,138
Sundries into Liverpool and South Wales	7,037	7,886	10,457
Ditto into London	3,020	4,419	5,229
	25,363	24,514	29,175
Chili into France	923	840	1,405
America ditto	2,108	2,069	2,630
Mexico ditto	650	2,155	2,267
Sundries ditto	377	490	645
	4,056	5,264	5,747
	29,419	29,778	35,922
Deliveries ditto	28,880	30,462	42,588

GUATEMALA AND CENTRAL AMERICAN EXHIBITION, 1897.—The Department of Science and Art has received, through the Foreign Office, a copy of a despatch from Her Majesty's Acting Consul-General at Guatemala respecting a Central American Exhibition of Science, Art, and Industry, which it is proposed to hold in that city next year, commencing on March 15 and closing on July 15. Although primarily a Central American exhibition, the Government of Guatemala are desirous that foreign nations should take part in it, a department will be assigned to them, and they will enjoy all the privileges possible, with the right of competing for the prizes.

MEXICAN ASPHALT.—The asphalt or Gilsonite deposits at Tepinal, on the Tecolutla River, Mexico, have lately received attention, and give promise of a considerable business being established in the extraction of this substance for export and home consumption.

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices, Liskeard, Cornwall, writes (April 23):—The mining market continues dull, being devoid of any inquiry for shares, and until some permanent advance is shown on tin prices will not improve. Quotations:—Basset Mines (fully paid), 1⅛ to 1¼; Carn Brea, 10s. to 11s. 6d.; Devon Consols, 1 to 1⅛; Dolcoath (fully paid), 15s. 6d. to 16s.; East Pool, 2¼ to 2⅜; Killifreth, 6s. 6d. to 7s.; Levant, 4 to 4¼; Polberro, 8s. 6d. to 10s.; Tincroft, 12s. 6d. to 14s.; West Kitty, 2⅛ to 2¼; Wheal Grenville, 6½ to 6⅝; Wheal Kitty, 4s. to 5s.; Wheal Metal, 3s. 6d. to 4s.

Messrs. ABBOTT AND WICKETT, Stock and Share Brokers and Mining Share Dealers, Redruth, write under date of April 23:—The market has been quiet throughout the week, and very little disposition apparent either to buy or sell. There has been a slight enquiry for Carn Brea and Tincrofts at present low quotations in view of the proposed amalgamation. Quotations herewith:—Blue Hills, 1s. to 2s.; Basset Mines, 1 to 1⅛; Carn Brea, ⅝ to ¾; Dolcoath (fully paid), 14s. 6d. to 15s. 6d.; ditto (5s. paid), 3s. 6d. to 4s. 6d.; East Pool, 2⅛ to 2⅜; Killifreth, 6s. to 7s.; Polberro, ⅛ to ¼; South Crofty, ⅛ to ¼; Tincroft, ¼ to ⅜; West Kitty, 2 to 2⅛; Wheal Grenville, 5⅜ to 6⅛; Wheal Kitty, ⅛ to ¼; Wheal Metal (3s. paid), 3s. 6d. to 4s.

MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write, April 23 (noon):—A good business has been transacted during the past week, and it has been spread over markets pretty generally. The changes in prices also are again, as a whole, very greatly in favour of holders. In home rails a large business has been done at improved prices, but in most instances best figures are not maintained, notwithstanding that the traffics announced yesterday were mostly very satisfactory, when taken into account that they compare with Easter week last year. Americans and Canadians are better in almost every instance, the advance ranging from ⅜ to 1¼, the principal exception being Norfolk Preference which finish ½ to 1 better. Mexican Rails dull, and changes contradictory, the Ordinary and First Preference being higher, whilst the Second show a fall of ¼. A distinct feature of the week has been the almost remarkable fluctuations in Consols, which, after having touched 114 at one time, finished 1 15-16 better on the week at 112⅞. The demand, indeed, for all high class investments continues without abatement, with the result that a further all-round advance has been established. We append list of other changes as they have occurred:—

CONSOLS.—Higher: Two and Three-quarter per Cent., 1 15-16.

COLONIAL STOCKS, &C.—Higher: Canada Registered, ½; Cape of Good Hope Registered, 1; Natal Inscribed, 1; New South Wales Inscribed, 1; New Zealand Inscribed, 1.

CORPORATION STOCKS AND DEBENTURES.—Higher: Batley Three per Cent., 1; Birmingham Three and a-Half per Cent., 2; Blackburn Four per Cent., 1 to 2; Bradford Four per Cent., 1 to 2; Glasgow Three and a-Half per Cent, 1 to 2; Leeds Four per Cent., 1; Manchester Four per Cent., ½.

FOREIGNERS.—Higher: Argentine Six per Cent., 1; ditto Five per Cent., ½; Brazilian Four and a-Half per Cent., 1; ditto Four per Cent., 1½; Egyptian Unified, 1; Italian Rentes, ⅜; Russian Four per Cent., ½; Spanish, 1⅞; Turks Three and a-Half per Cent., ⅜.—Lower: Portuguese Three per Cent., ⅛.

BANKS.—Higher: Bank of Liverpool, ½; Imperial of Persia, ½; London and Middlesex, ½; Manchester and County, ⅜; District, ½ to ⅝; Parr's and Alliance, ½ to ⅝; W. D. and Manchester and Salford, ⅛ to ¼.—Lower: Consolidated, 1-16; Imperial Ottoman, ½.

INSURANCE.—Higher: Boiler Insurance and Steam Power, ⅛ to 1; Commercial Union, ½ to ⅝; Lancashire, 1-16; Liverpool, London, and Globe, ⅜; London and Lancashire, ⅛; Thames and Mersey, 3-16; Manchester Fire, ⅛.—Lower: Palatine, ⅛.

COAL, IRON, &C.—Higher: Bolckow Vaughan (£12 paid), ⅜; ditto (£20 paid), ⅜; Cammells, 1; Ebbw Vale, ⅛ to 3-16; Parkgate, ⅛.—Lower: Sheepbridge A, ⅜.

TELEGRAPHS AND TELEPHONES.—Higher: Anglo-American, ⅛; National Telephone, 3-16.

BREWERIES.—Higher: Allsopp's, 5; Bent's, ⅛; Chester's, ⅛; Clarkson's, 1⅛ to 2; Hardys, 1⅛; Massey's, ⅛; Springwell, ⅛ to ⅜; Tamplin's, ⅛.—Lower: Guinness, 5.

MISCELLANEOUS.—Higher: Armitage's, ⅜ to ⅝; Blackpool Winter Gardens, ⅛; Bovril, 1; Coats, ⅛ to ⅜; Eastmans, ⅛; Hetherington's, ⅛; Howard and Bullough, 1-16 to 3-16; Kellners, ⅛ to ⅛; Lever Brothers, ⅛; Manchester Royal Exchange, 3 to 5; Pacific Steam, 1⅛; Gas Light "A," 3 to 5; Imperial Continental Gas, 6 to 8; Suez Canal, 4.—Lower: Brunner Mond., ⅛ to ⅜; Fowler Brothers, ⅛; Salt Union, 1-16; Sir J. Whitworth, ⅜.

ENGLISH RAILWAYS.—Higher: Caledonians, 2; ditto Deferred, 1⅛; Great Eastern, ⅜; York A, ⅜ to ⅝; Great Western, ⅛; Brighton A, 4; Chathams, 13-16; Sheffield A, ⅜; Districts, ⅛; Midland, ⅛; North British, ⅜; North Eastern Consols, ⅜.—Lower: London and North Western, ⅛; South Eastern Deferred, ⅛ to ⅜.

AMERICAN AND CANADIAN.—Higher: Ontarios, ⅛; Union Pacifics, 1 1/16; Atlantic First, ⅜; Aitchisons, ⅛; Canadian Pacifics, ⅜; Grand Trunk Guaranteed, 1⅛; ditto First Preference, ⅜; ditto Second Preference, ⅜; ditto Third Preference, ⅛; Mexican Rails, ⅜; ditto First Preference, 2; Milwaukees, 1; Denvers, ⅜; ditto Preference, 1⅛; Louisville, 1⅜.—Lower: Mexican Railway Second Preference, ⅛; Central Pacifics, ⅛; Norfolk Preference, ⅛ to 1.

LATER (4 P.M.)—Markets have been quiet all day and close with a drooping appearance. Fluctuations, however, have for the most part moved within narrow limits.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroker (April 23), writes:—During the past week the markets have been inactive. Fluctuations have been numerous but within narrow limits owing to the unsettled state of affairs in Rhodesia. Trade reports continue favourable, and should help copper and coal and iron concerns.

In shares of coal, iron, and steel companies prices show little alteration. Steel Company B Debentures offered. Marbella are at 42s., Niddrie Coal 40s., Steel Company of Scotland 98s., and Wilsons and Clyde 8.

In shares of copper concerns prices are generally better, although the market for the metal is erratic, ascribed to manipulations by Americans. Arizona improved from 49s. to 59s., and are now 53s. 6d., Copiapo are at 42s. 6d. Tharsis and Tinto both steady.

In shares of gold and silver mines a fair amount of business has been done. The principal dealings have been in Chartered, which declined from 78s. 9d. to 64s. 6d., and are now about 67s. 6d. Consolidated Gold Fields declined from 12½ to 11½, East Rand touched 6 9-16, and Randfontein fell from 64s. 9d. to 62s.; but are now both a little better. Hit or Miss are firmer on an improvement reported at the mine. Aurora West are at 27s. 6d.; African Estates, 40s.; Australian Broken Hill, 1s. 3d.; Afrikander, 27s. 6d.; Bechuanaland, 31s. 3d.; Balaghat, 3s.; Big Blow, 14s. 6d.; Broken Hill, 50s. 6d.; Bonanza, 55s.; Cripple Creek Pioneer, 37s. 6d.; Croesus, 35s. 6d.; Day Dawn P.C., 4s.; Eastleigh, 22s.; Emma, 2s. 3d.; Gold Creek, 2s. 9d.; Golden Crown, 46s. 3d.; Gold Fields of Mozambique, 21s. 3d.; Guadalcazar, 2s. 9d.; Great Coolgardie, 3s. 6d.; Gold Coast Development, 3s. 9d.; Golden Horse Shoe, 27s. 6d.; Hauraki, 16s. 6d.; Hainault, 33s.; Kanowna, 12s. 6d.; Kapanga, 15s. 6d.; Londonderry Lands, 2s. 9d.; Mashonaland Agency, 41s. 3d.; Marchison New Chums, 7s. 6d.; Mount Rowe, 27s. 6d.; Orion, 42s. 6d.; Rhodesia (Limited), 23s.; Rhodesian Mining and Finance, 23s. 9d.; Rhodesian Exploring, 6d.; St. Augustine, 9s.; Southern Land, 3s.; Torva Exploring, 20s.; Umtali, 1s.; Wentworth, 21s. 3d.; Wealth of Nations Extended, 21s. 3d.; and Zambesia Exploring, 52s. 6d.

In shares of miscellaneous companies prices are generally better. In oil companies' shares Broxburn have advanced on expectation of a better dividend. Dividends are also looked for in Pumpherston and Young's shares. Broxburn are at 10½; Pumpherston, 7¼; and Young's 34s. Cheshire Alkali Preferred are at 25s., and Nobel Dynamite Trust 16⅜.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of April 23:—A considerable general business has been transacted during the past week. The two leading Scottish railway stocks have been largely dealt in at enhanced prices. Caledonian Deferred has advanced from 60¼ to 62, North British from 46 15-16 to 47⅜, Glasgow and South-Western from 124½ to 129, Great North of Scotland from 111⅛ to 114. Highland has declined from 104⅜ to 104. A good business has been done in Railway Investment Deferred stock, which has risen from 23¼ to 25 7-16. In insurance shares North British and Mercantile have improved from 41 1-16 to 41½, Commercial Union from 37 7-16 to 38, Liverpool, London, and Globe from 53 11-16 to 54, London and Lancashire from 19¼ to 19⅜, Royal from 53⅜ to 54½, Scottish Imperial from 34s. to 38s. 9d. Scottish Union and National A are 6d. lower at 90s., National Bank have risen from 357 to 359, Union from 21 13-16 to 21⅞, Commercial Bank of Australia from 35s. to 37s. British South Africa shares have fallen from 77s. 6d. to 68s., Marbellas have fallen from 43s. to 41s., Arizona Copper have advanced from 49s. 9d. to 55s. 3d. In oils Broxburn have improved from 10 1-16 to 10 3-16, Oakbank from 6⅜ to 7, Pumpherston from 7 to 7⅛, Young's from 33s. to 35s. 3d. Holmes have receded from 30s. to 25s. 6d., Linlithgow from 25s. to 23s., Distillery 11s. 3d. higher at 20⅜, Prairie Cattle shares 2s. lower at 16s., Western Ranches 2s. 6d. lower at 5⅛, Coat's 20s. higher at 35½, Assets 2s. lower at 48s.

MINING IN CORNWALL AND DEVON:

NOTES ON MINING IN THE WEST.

(FROM OUR SPECIAL CORRESPONDENT.)

THE prospect of a settlement of the weary East Pool-Wheal Agar embroglio has been hailed with general satisfaction throughout Cornwall. The offer to sell the Wheal Agar plant and machinery to the neighbouring mine at a price to be fixed by arbitration is generally regarded as a very fair one, and little doubt is felt as to its being accepted. It will surely pay East Pool shareholders better to accept the fine Wheal Agar engine at an arbitration price than to erect a new one in their own sett. In some quarters the course advocated by Mr. Heard might have been preferred, but it is evident that the largest shareholder, including the Chairman, are sick of the whole business, and that their main anxiety is to get out of it as quickly and completely as possible. There is little hope, we imagine, of Mr. Hattersley engaging in further mining ventures in Cornwall, nor can his decision be wondered at in view of his experience in connection with Wheal Agar.

A FINAL and satisfactory settlement of the long-standing difficulty would probably have a favourable influence on the price of East Pool shares, dealings in which have for a long time been merely nominal. The working of the mines will, it is reasonable to anticipate, be resumed with vigour, and in a few months they should be clear of water. The chances of pulling South Crofty out of the fire should be distinctly improved by the settlement, and the proposed limited company to work that sett, universally recognised as one of great possibilities, may yet be successfully floated.

DOLCOATH ticketed a large amount of tin last Tuesday, and the mine is reported to be looking extremely well. The bricking of the new shaft is being carried on with all speed, and sinking will soon be resumed. It is confidently expected that progress with the work will be much more rapid in the immediate future than it has hitherto been. Specimens of silver lead ore have been found recently in the mundic pitches now being opened up.

SOUTH CONDURROW has been under a cloud for so long that the news that a profit was made on the last quarter comes as a welcome surprise. It is true that the balance of receipts over expenditure is only £25, and that there is still a deficit owing to previous losses, but the position of the mine is, at all events, more hopeful than it has been for some time. The mine is being worked on a small scale at present, but it is something to be able to keep going at all in these times, and a more vigorous policy will doubtless be pursued should the rise in the price of metal which Mr. Strauss predicts come about.

LEVANT continues to look well; they are now returning some splendid copper ore from the under sea part of the mine. The little mine at Kemdjack, to which reference was recently made, is opening up in a promising fashion, and hopes are entertained that it may prove a permanent concern. A new traction engine has just been purchased for Levant.

CAPTAIN JOHN PENBERTHY, who not long ago returned to his native county from Bolivia, will shortly leave again to discharge the duties of manager of the Frontino and Bolivia Gold Mine.

ELECTRICITY DIRECT FROM COAL.—Very little has of late been heard about the coal-consuming galvanic cell. We have now a fresh communication which is certainly of a very promising kind. While engaged in experiments upon the great desideratum, a carbon anode which would undergo combustion and not the dreaded di-integration, Dr. A. Coehn found that the chief conditions to be studied are temperature and current density. When both these are duly proportioned, carbon is dissolved by the electrolyte, dilute sulphuric acid of a certain concentration, and redeposited upon the cathode. Thus the elements of a galvanic carbon cell were given. It consists of a carbon anode, dilute sulphuric acid, and a cathode of lead peroxide, and yields a steady current of an electromotive force of 1·03 volts. The actual oxidation of carbon in the cell was first studied in 1884 by Bartoli and Papasogli. These scientists obtained an E.M.F. of 0·2 or 0·3 volt only. Dr. Coehn has hence made very good progress already. The cathode of lead peroxide is, of course, objectionable, but other oxides may possibly take its place. In what state the carbon passes into solution is not decided yet. Dr. Coehn is studying the scientific side of the problem, and will remain busy enough with his task for some time. The researches are of the highest importance. We may hope finally to settle the vexed question of the valency of carbon, and the technical development will follow.—*Elektrotechnische Zeitschrift.*

NOTES FROM ANDALUCIA.

PAPER ON THE CUPREOUS PYRITES DEPOSITS OF ANDALUCIA AND ALGARVE.

RETROSPECTIVE AND PROSPECTIVE.

Extracts and Notes from Mining Operations and Reports on these during the past 25 years.

By WILLIAM GUTHRIE BOWIE.

(*Continued from page* 446.)

IN 1888, the commercial value of cupreous pyrites per ton, and with 1½ per cent. Cu. was about 8s. for copper, and £1 for sulphur, while the cinders from this were often sold for furnace fettling at from 5s. to 8s. per ton, and if this refuse represented the half of the original weight of the ore, then this was worth altogether from £1 13s. to £1 16s. as the then commercial value of such a class of ore.

Sulphur has fallen in price, it is true, but even now, as is instanced in the transport of pyrites by all the large companies, and particularly Santo Domingo, as mentioned, from its cementation ore now decopperised, this is done with profit, and there is no reason why the ferruginous caps, or even the ferruginous wastes of the calcined ore should not again be utilised as iron ores for the manufacture of iron. Unfortunately, in respect of the caps, the mines worked by open-cast, with the exception of Rio Tinto in its north mass, have not deposited these apart from the other earthy material removed, and mixed with them, during the opening of these cuttings, and are thus lost, or require some expenses for classification, while that from calcination is also much mixed with schists and other impurities as copper sulphides; while it is not too much to expect that the sulphate of iron in solution in the liquors of cementation operations may also be precipitated, as has been done in some instances at Lapilla, and turned to profit.

Here we have in addition to neglect in studying these matters, also want of foresight, and deliberate destruction of the sulphur, &c., contents of these ores—also another instance of all these errors in respect of the future uses of these oxides and sulphates of iron, all of which, being in considerable abundance, and even concentrated by Nature in fairly pure quantities, could and can be easily preserved apart, without extra cost, during mining and cementation operations, and the day may come when these may become important factors in supporting the mine railways, and help to pay dividends. That such matters would not be neglected in the future is evident, so here are new elements of profit that come to help all these companies, if their operations are conducted in the future with a proper chemical knowledge of the composition of the ores in these mines, or even "common sense" operations are adopted. It will surprise many that during the sulphur smoke agitation there were authorities in chemistry that declared the cupreous pyrites of Andalucia could not form sulphates of copper by exposure in the natural state, even in the face of Nature doing so in all the mines, and operations conducted in 1875-76 with success at Lapilla, on ores, as stated, considerably altered by metamorphism caused by hypogen rocks, so there need be no fear to adopt natural vitriolisation in Rio Tinto, and other mines similarly affected.

The losses caused by the calcination of this ore *in situ* are as follows, allowing low figures in all say for 1,500,000 tons of ore so treated annually in Andalucia:—

All the sulphur is lost about 50 per cent. = to (say) 700,000 tons at 13s.	£455,000
Copper lost as sulphides, often 1½ per cent. Cu, say 1 per cent. = to (say) 15,000 tons at £40 ..	600,000
Iron consumed at least 50,000 tons at £3 10s. ..	175,000
Iron contents lost in calcined ore 40 per cent. Fe (say), 600,000 tons at 10s.	300,000
(Upwards of 100,000 tons of iron is the waste in Andalucia.)	
No less than 1,200,000 ounces of auriferous silver,* which, taken at the low value of 4s. the ounce, is equal to	£240,000
The other metals, as lead, antimony, zinc, and arsenic need not be calculated.	
Total loss of contents of ore by calcination ..	£1,770,000

in 1,500,000 tons, being the amount wasted in Andalucia every year. Hence as much wealth is lost as that recovered by this process, and yet it has taken years to convince many of this fact. It is certainly difficult to get companies to make new works and incur further expenditure, or even induce managers to adopt other processes than those to which they have been accustomed, and are so far sanctioned by the uses and customs prevailing in the locality. Hence the present exertions to introduce economies in existing processes.

The above will, perhaps, help all to estimate the advantages to be yet derived by all the companies, from even the poorest ore, by adopting natural vitriolisation and other approved new processes based on electrolytic effects, that either recover all the important constituents of this ore, or preserve them intact for future uses, as instanced in the case of sulphur.

Returning for a moment to the consideration of the losses of copper, there are others already hinted besides that lost in calcination, as that carried away in the liquors from cementation operations, and in smelting the produce for copper, and these become in large mines serious quantities, and much of this should be saved.

Thus in the wet assays, or even electrolytic assays, the following differences are observed between these and the dry assay, or returns in smelting:—

Wet Assay.		Dry Assay.
3 per cent. Cu.	=	2⅞ per cent. Cu.
2·75 per cent. Cu.	=	1⅞ per cent. Cu.
2·50 per cent. Cu.	=	1¾ per cent. Cu.
2·25 per cent. Cu.	=	1½ per cent. Cu.
2 per cent. Cu.	=	1⅜ per cent. Cu.

and so on. (For further details on this matter see the works of Mr. J. J. Baringer and others on assaying copper.)

That lost in the liquors from cementation has no fixed losses, and may be the same for a poor in copper liquor as for one richer in this. Hence mines which have rich liquors lose less copper in proportion to that precipitated than those which have poorer liquors.

Assays made of the liquors, leaving the cementation works, give very variable results, from 50 grams up to 250 per cubic metre of liquors, while in times of floods, and always during the winter months, large quantities of the very richest copper liquors are completely lost. It may, however, be assumed that liquors averaging one kilogram of copper in solution in one cubic metre of water only deposits 95 per cent. of this in actual practice in the cementation works, and when we consider there are mines that pass several thousands of cubic metres of liquors every 24 hours from their cementation works, then it will be seen this slight loss becomes in time very considerable.

* 4,800,000 ounces are probably lost yearly of this auriferous silver.

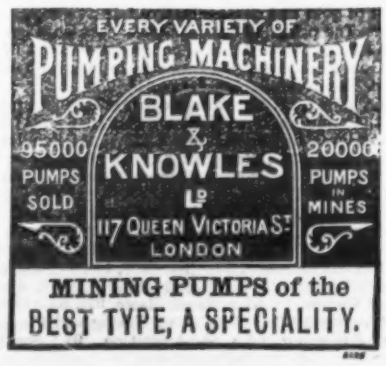
(*To be continued.*)

THE PROGRESS OF BRITISH COLUMBIA.

By G. F. MONCKTON, M.E.

UNTIL recently nearly all the gold produced from the gravels of British Columbia was produced by the simpler methods of excavating the material to be washed by hand. Now, however, hydraulic methods are coming into use, but of the mines at present working on this system the Cariboo and Horsefly are the only producers of note. To the British public the work of the Cariboo Gold Fields (Limited) will have more interest, this being an English company. In order to provide water for its works this company is digging 14 miles of ditches, and laying 3 miles of steel pipe. There will also be half a mile of tunnelling. This company is going to work part of Williams' Creek, which is one of the richest alluvial deposits ever discovered, having produced over £40 per foot. In the lower part of this gulch the water was so great that the mining companies have hitherto been unable to work the gold lying on bedrock. The present syndicate controls a larger area than those which preceded it, and will work by hydraulic elevators, lifting the gravel 100 feet, and then washing it. The undertaking is exceedingly difficult, to say the least, but if it succeeds the company will have one of the richest of British mines. Another English company working in British Columbia with a large amount of capital is the Lillooet, Fraser River, and Cariboo Mining Company. Hitherto its work has been mostly confined to prospecting, which is being carried on in the Bonanza quartz property and also on gravel benches around Lillooet. The great mineral producing district at present is West Kootenay, which produced over £400,000 last year. This large district includes many different camps, but probably fresh deposits equally rich will yet be found in it. It ranks as one of the very richest of all the mineral districts of North America. In this article I cannot allude to all its districts in detail, but some brief notes on Trail Creek may interest the reader. A year ago there were less than 300 people in the locality, but now there are over 3000 in Rossland alone. Next year it is estimated that the district will produce ore worth £1,000,000. This year it turned out £200,000. A smelter of 250 tons daily capacity has been blown in at Trail, and one of 125 tons is operating at Rossland. Two others are to be built there. The lodes are associated with diorite and carry iron pyrites containing some copper and running high in gold. In Kootenay is the Silver King, owned by the English company known as Halls (Limited) This company has a smelter which is now working, and a prosperous career may certainly be foretold for the mine. There is only one lead smelter working in Kootenay. This is the Pilot Bay plant, which commenced work in March, and has been in blast most of the time since. Up to the end of the year 52,000 tons of ore had been mined from the company's claims, and in addition to this several thousand tons were bought to treat. The only good coal produced on the west coast of North America is that mined in Vancouver Island, the largest collieries in which are owned by the New Vancouver Coal Company (Limited) of London. These works produced 338,000 tons last year. The company owns an immense property, and has a large area, which is but little explored. Although upwards of £12,000,000 has been produced from the gold gravels of the province, the quartz veins have been but little developed. The fact is that most of the bedrock is overlaid by heavy surface, and covered by an undergrowth which offers in its luxuriance the greatest possible hindrance to the miner. Quartz veins have been found, and those of Boundary Creek, which is one of the most promising districts, yielded upwards of £27,000 last year. There are auriferous veins at Texada Island which show gold well, but are supposed to be pockety. Of the coast generally it may be said that there is every probability of good ore being found there, but sufficient work has not yet been done to enable us to pronounce upon it. Railroads are now being pushed ahead in different directions, and this will be of the greatest importance to the country, inasmuch as it covers an area as large as that of Russia in Europe, and those mines which can be developed at present are only those which happen to be in the neighbourhood of railways or navigable rivers. If capital is only provided there is no telling what the output of the province will be in the immediate future, as the owners of so many good locations would be enabled to ship ore, which they cannot do for the want of money in hand. All who have a spark of patriotic sentiment in them must deeply regret that the British have been so slow hitherto to grasp the treasures offered them here, but prefer to invest their money in countries which are under the sway of rotten Governments, infested by warlike savages, and governed, if governed at all, by the alien and the adventurer. In British Columbia we have absolute security, and the inhabitants are our own kith and kin, but yet such development as has been compassed is due to the pushing Yankee. The American method of bonding properties is the one in vogue here. A syndicate pays the mineowner a deposit of (say) 10 per cent. on the price asked, and agrees to pay at the end of 12 months a certain sum, if it should think fit, at the end of the period name, the mineowner binding himself to take that sum for the property if paid within 12 months. During the currency of the bond the syndicate works the property, and in many cases has made enough from ore shipments to pay for the property. There is no doubt from the enquiries now coming in from abroad that this year will see an immense advance in the development of the mineral resources of British Columbia. No great discoveries are likely to be reported before June, as an unusually hard winter has made the season for prospecting late. However, the large amount of snow which will melt in the early summer will assist the prospector, as the waters rushing down the mountain slopes will bare more ground than usual.

MEETINGS were held on Thursday, at Winchester House, of the shareholders in the Empress of Coolgardie Gold Mine and McCulloch Coolgardie Gold Mine, but our representative was refused admittance to both of them,



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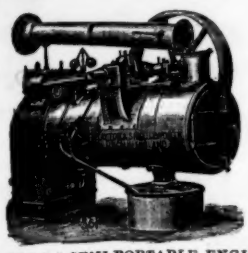

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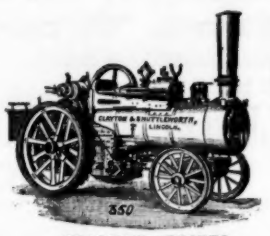

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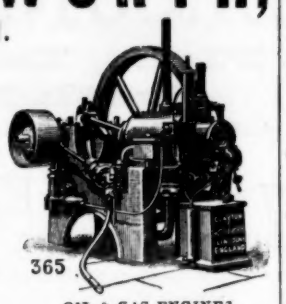

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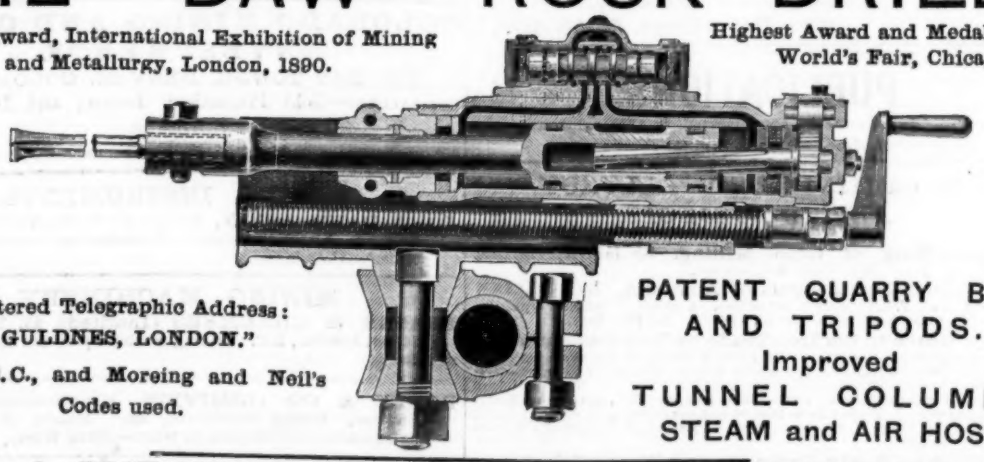

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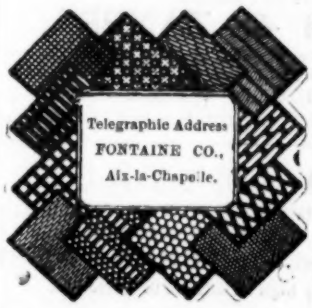

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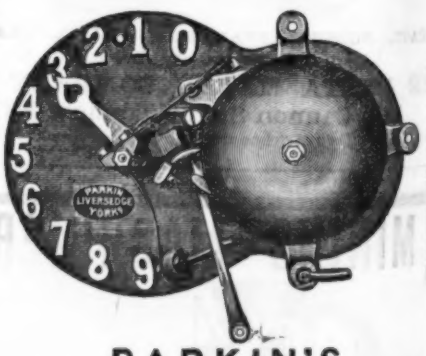

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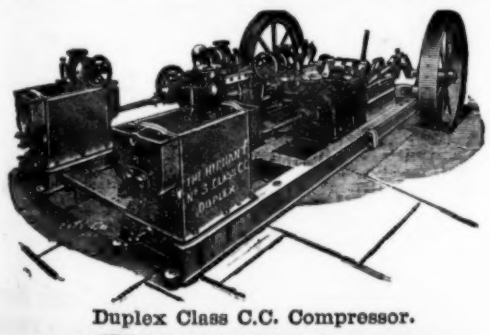

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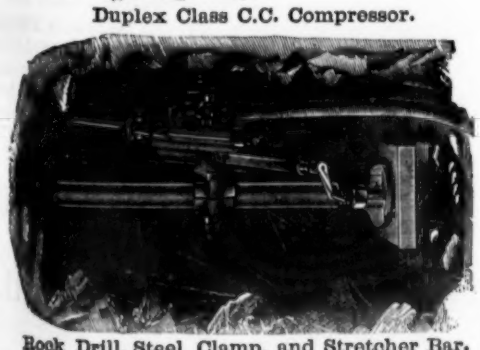

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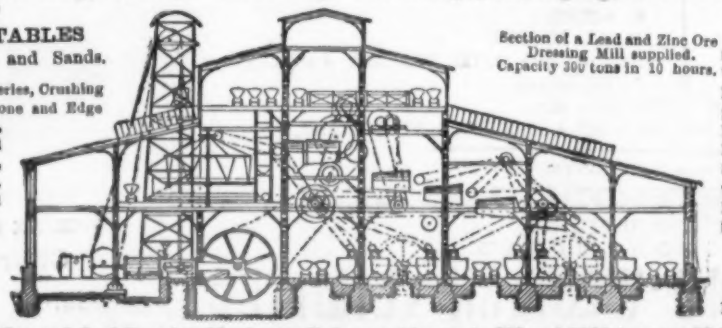

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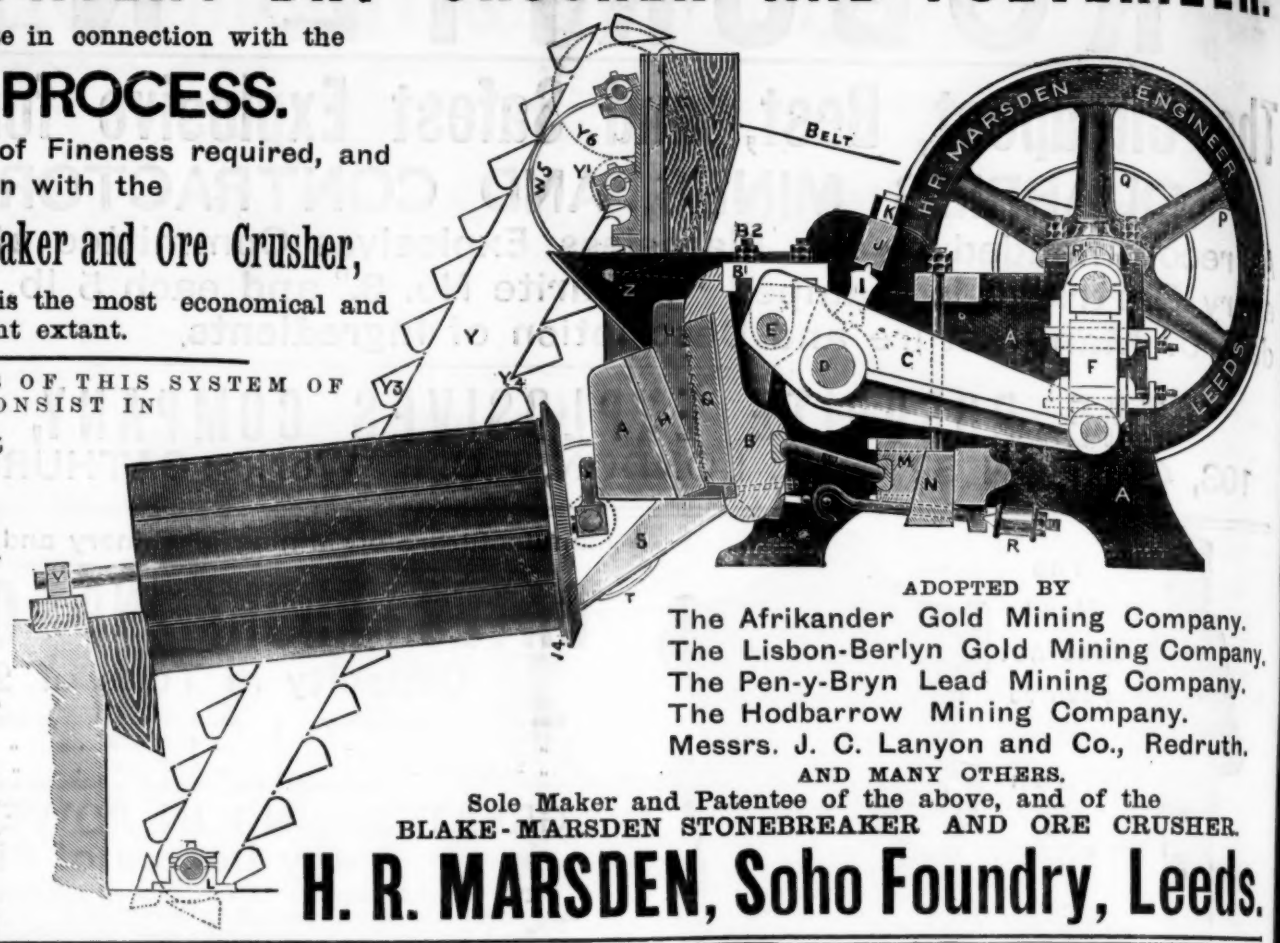

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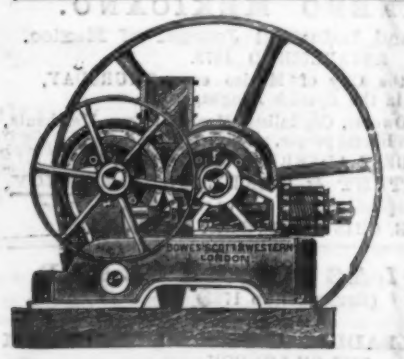

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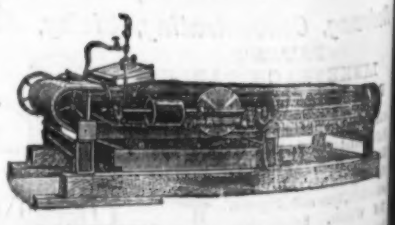

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